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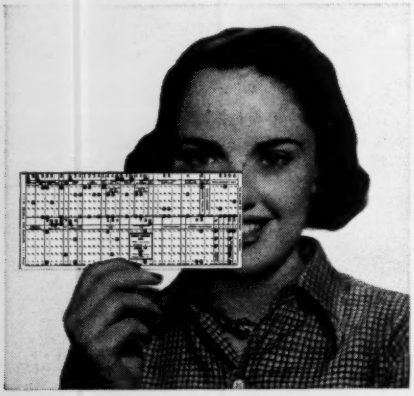

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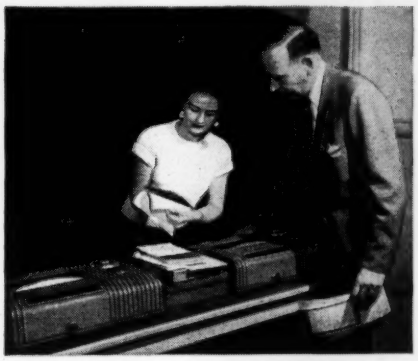

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"You Break My Heart!"

". . . executives suffering from heart illness quite often possess what has come to be known as the 'coronary personality'. . . . Some mechanism, however, should be provided for the release of the tensions built up in an organization?"—*Fortune Magazine*, May 1955.

HOW much does top management know about the depreciation in management's inventory of managers—Physical, Mental, Emotional, and Professional? Yet no self-respecting corporation management would be without up-to-the-minute figures on depreciation in their plant and inventory. We even have figures on soil erosion of the nation but we take no accounting of the emotional erosion among the team-mates constituting management.

Confirmation of this erosion can be found in the very phrases of our everyday speech. How often one executive says of another, "He makes me sick," "That guy is a headache," "He is poison," or to another executive, "You're breaking my heart," or "You give me a pain in the neck," Unfortunately, these emotion-loaded words by no means understate the emotional and even physical facts. The "stress" of poor teamwork is very real and we managers do frequently make each other literally sick. Only with constant attention and effort can we maintain a teamwork climate which adds power, health, enthusiasm, and radiance to working and living together.

When the medical research people shall have finished finding the causes of coronary thrombosis and the other occupational diseases of executives, they will undoubtedly have much to say about sugar and fat, coffee and tobacco, and about lack of exercise. But there is a strong chance that the major reason the Chinese coolie and the Bantu tribes of Africa do not have coronary crack-ups will be their avoidance of executive "stress."

Annual medical check-ups may indeed reveal executive spoilage, but preventing such waste is our main objective. To prevent such wastage we must:

Move away from:	*Toward*:
1. Fuzzy, vague assignments	Clear definitions of duties
2. Piling on pressure for results without delegating equivalent power	Absolute matching of responsibility with authority
3. Scrambling ruthlessly for limelight and precedence amidst arbitrary and political decisions	Systematic, objective review and reward
4. Letting emotional tension build up, dammed up to explode in major cloudbursts	Continual ditching, draining, and ventilating by communication, review and decision
5. Always "telling 'em"	Listening from the top and forced upward communication from the bottom
6. Perpetuated conflict and intensified mutual frustration	Careful provision for creative thinking, problem solving and rational, prompt decision making
7. Everybody scrambling to climb over each other like bees too busy swarming to make honey	Leadership in trusteeship in motivation and spiritual unity from top to bottom

It may be that cancer of the lungs is due to smoke and smog and air pollution, but certainly actual heartbreak is largely due to the emotional, psychological and spiritual climates in which many executives breathe and work.

F. F. BRADSHAW

WAINO W. SUOJANEN has combined business with teaching experience, having worked for Uarco Business Forms, National Automotive Fibres, and Safeway Stores, Inc. and taught at the University of Vermont and the University of California at Berkeley, where he is now Assistant Professor of Business Administration. This article represents a part of his research in the role of management in the large corporation. He received his B.S. degree from the University of Vermont in 1942. After army service, he received his M.B.A. from Harvard in 1946 and his Ph. D. from the University of California in 1955.

The Span Of Control— Fact Or Fable?

By Waino W. Suojanen
School of Business Administration
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Can executives effectively supervise more than five people? It is argued here that they can, and that the principle of span of control is no longer valid, particularly as applied to our larger government agencies and business corporations. "The institutionalization of the organization and the development of primary relationships among the members of the executive group together provide such a high degree of control that the area of effective supervision of the chief executive is much wider than that predicted by the span of control principle."

ONE of the basic doctrines in the theory of organization is the principle of the limited span of control of the executive. The ability, capacity, and time of the executive are necessarily restricted by biological and physical factors. Therefore, if the number of subordinates reporting to the executive is kept to a minimum, the quality of coordination is better than if some larger number of subordinates is supervised.

The size of the organization itself is limited by the fact that, in a hierarchical organization, an increase in scalar levels, or sub-maximization centers, expands the number of organization offices through which communications must move in order to arrive at an authoritative decision. This proliferation of "red tape" in turn renders the organization less efficient and effective than at some supposedly smaller, and more optimum, size. This paradox between the limited span of control principle and the principle of excessive scalar levels has been pointed out by Simon.[1] An increase in the number of subordinates reporting to each executive does not solve the problem of excessive hierarchical levels because the span of control limitation makes for less efficient operations.

If both principles are actually applicable to the large organization, then it must follow that many large government agencies and business corporations are less efficient than their smaller counterparts. However, large corporations not only continue to grow in size but also comparisons of various sizes of corporations are not convincing as to the superiority of smaller, as opposed to larger, corporations. Such scale comparisons can not be made among government agencies because no dollar value can be assigned to output. However, administrative techniques in both business and government are similar enough that one can argue what holds true in the one also applies in the other. At least, in neither case, does the span of control appear to have set a limit to the actual size of the organization. Rather, the size of the typical organization has increased with the increasing complexity of the problems to be solved. There is no evidence to indicate that in our contemporary society the span of control has ever served to restrict size although declarations of its universal applicability are encountered time and again both in theory and practice.

The theoretical justification for the restricted span of control was developed by Graicunas and Davis.[2] Graicunas identifies and classifies three types of interpersonal relationships in the unit organization. If the number of subordinates reporting to a common superior is *n*, then the number of *direct single relationships* is also equal to *n*. *Cross relationships* are those that involve interactions between any two subordinates and the superior; the number of possible cross relationships that can occur is given by the formula $n(n-1)$. *Direct group relationships* are essentially a combination of direct single relationships and cross relationships; they are direct in the sense that they can be classified from the point of view of any participant as a member of a group in con-

[1] *Herbert Simon*, Administrative Behavior, (*New York: The Macmillan Co.*, 1948), *p.* 26; "*The Proverbs of Administration*", Public Administration Review, *VI*, 1946, *pp.* 53-67.

[2] *V. A. Graicunas*, "*Relationship in Organization*", Papers on the Science of Administration, *ed. L. Gulick and L. Urwick*, (*New York: Columbia University*, 1947), *pp.* 183-187; *and Ralph C. Davis*, The Influence of the Unit of Supervision and the Span of Executive on the Economy of Line Organization Structure, *Bureau of Research, Research Monograph No.* 26 (*Columbus: The Ohio State University*, 1941).

tact with the superior; they are cross relationships in that they can be classified as contacts between the superior and a group of two or more subordinates. The number of possible direct group relationships is given by the formula $\frac{n(2^n-1)}{2}$. The direct group relationships increase geometrically, and it is for this reason, that they occupy a strategic role in Graicunas' hypothesis of the limited span of control.[3]

SPAN OF EXECUTIVE CONTROL

Davis further amplifies the Graicunas hypothesis by distinguishing two qualitative levels of supervision. The first level is the *unit of supervision*. The unit of supervision applies to the first-line supervisor. Activities, at this level, are mostly physical and are mainly concerned with control of current operations. The relative absence of mental activity permits a wide span of control with the optimum ranging from 15 to 20 people.

The *span of executive control*, according to Davis, applies to all executives above the level of the first-line supervisor. It is narrower because executives are concerned more with planning and organizing activities. Since this type of work is largely mental and deals with intangibles and abstractions, it is much more exacting and demanding than physical activity. As a result, the executive can not effectively supervise more than three to seven first-line supervisors or subordinate executives. Davis indicates that the optimum span of executive control is, in most cases, limited to not more than five people.

To the knowledge of the writer, there is no evidence to indicate that the span of control principle has ever been the subject of empirical testing. Nonetheless, both of the hypotheses described above have been accepted in administrative theory as valid principles of organization. If the limits of the span of control are as rigorous in practice as in theory, then it would seem to follow that exceeding these limits would seldom occur in practice. In other words, if the system of governance in the bureaucratic organization is rationally planned and executed, and if there is a tendency for the executive span of control restraint to limit the coordinating ability of the executive beyond four or five subordinates, then it would follow that few successful organizations would have more than four people reporting to any executive within the hierarchy. Further, it would also seem reasonable to assume that the number of people reporting to the chief executive would tend to approximate the theoretical ideal very closely because, at executive levels, nearly all activity is concerned with the abstract and the intangible.

A recently completed research study has made available information on the number of executives reporting to the president in 100 large companies (over 5,000 employees).[4] One of the major conclusions of this study is that the theoretical limits of the executive span of control are in practice more often violated than they are observed as indicated in Table I. In addition, the top leadership of large corporations appears to have "widespread complaints about the validity of the theory of span of control." According to this study, all of the firms included in Table I were "known to have good management practices." Assuming that the maximum number of subordinates that can effectively be supervised by one executive is four (the number mentioned by Graicunas), then only ten percent of the firms included in Table I have effective supervision at the level of the supreme coordinating authority. But, if all the firms included in the sample were known to have "good management practices", then doubts are raised as to the validity of the Graicunas and Davis hypotheses. This is especially significant in view of the fact that the median number of executives reporting to the president in the study was between eight and nine,

Table 1

Number of Executives Reporting to President in 100 Large Companies (over 5,000 Employees)

No. of Executives Reporting to President	Number of Companies	Total Theoretical Direct and Cross Relationships
1	6	1
2	—	6
3	1	18
4	3	44
5	7	100
6	9	222
7	11	490
8	8	1,080
	Median	
9	8	2,376
10	6	5,210
11	7	11,374
12	10	24,708
13	8	53,404
14	4	114,872
15	1	245,974
16	5	524,534
17	—	1,114,392
18	1	2,359,612
19	—	4,981,090
20	1	10,486,154
21	1	22,020,532
22	—	46,137,824
23	2	96,469,518
24	1	201,327,166

Sources: Columns (1) and (2) are from Ernest Dale, *Planning and Developing the Company Organization Structure*, op. cit., p. 57; Column (3) is from V. A. Graicunas, "Relationship in Organization" in *Papers on the Science of Administration*, op. cit., p. 186. (Relationships beyond 12 subordinates have been computed according to Graicunas' formulas.)

[3] *In his discussion of Figures* 1 *and* 2, ibid., *p.* 186, *the following statement appears, "Note that for four subordinates it is quite easy to grasp and remember every combination of groups, but that from five on, this is no longer possible, because the various groups become a maze of confusion."*

[4] *Ernest Dale*, Planning and Developing the Company Organization Structure, *Research Report No.* 20, (*New York: American Management Association*, 1952).

or roughly twice as high as the indicated limit, and that the presidents of twenty-four firms in the total sample of one hundred had thirteen or more subordinates reporting directly to them.

Careful studies made of the work habits of corporation presidents in Sweden indicate that they spend only 56 percent of their time inside the firm and 44 percent of their time outside the firm.[5]

Many American executives do devote a considerable amount of time to these matters also, and, to the extent that this occurs, it results in the executive concerned being able to spend only part of his time in coordinating the internal affairs of the organization. Insofar as the presidents of the corporations included in the American Management Association study spend only part of their available time inside the organization, their span of control is understated. Furthermore, in any large organization, a number of people, who are members of the organization, but do not report directly and formally to executives have access to him—whenever this occurs, the span of control of the executive in question may again be understated.[6]

The American Management Association study is significant for another rea-

[5] *Sune Carlson*, Executive Behaviour: A Study of the Work Load and the Working Methods of Managing Directors, (*Stockholm: C. A. Stromberg Aktiebolag*, 1951), *p.* 62.

[6] *An interesting illustration of this occurs in the following quotation: "General Eisenhower told me in an interview that in World War I he had at one time* 150 *battalion commanders reporting to him. This he believed, resulted in cleaner understanding up and down the line, an opportunity for personal inspiration, and a chance to voice complaints. Now it would be physically quite difficult even to receive reports from* 150 *people or, to express it in organizational language, 'effectively supervise' so many people. What the General had in mind is that accessibility to the chief executive can make important contributions. The number of people he supervised was small, while the number who had access to him was large." Ernest Dale, "Dynamics and Mechanics of Organization" in* Organization Planning and Management Development, *Personnel Series No.* 141, (*New York: American Management Association*, 1951), *pp.* 7-8.

Another interesting example of this type of accessibility is made by Sir Ian Hamilton, The Soul and Body of an Army, (*London: Edward Arnold and Co.,* 1921), *p.* 86: *"The disciplinary code of the Canal was notably less strict than in an English coal mine. Any black labourer could demand, any forenoon, an interview with Colonel Goethals himself, and be ushered into his presence right away, without intermediary. The rank and file were the clear negation of homogeneity.* Morale *had no place in a mere money-making engagement. And yet, so wonderful was the effect of a well-thought-out, perfectly-organized system, that, of itself, it gave a distinct touch of discipline, cohesion and* esprit de corps *to the whole motley concern."*

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son. In six of the corporations covered in the study, only one executive reports to the president. In firms in which this is the case, it is plausible to assume that the planning function is largely the responsibility of the president and that the procedural-executory plan is the responsibility of this particular subordinate whatever his title may be. Functionalization of this type is an explicit recognition that the elements of coordination can be segmented and different members of the leadership assigned the duties of supervising them. In a theoretical sense, this segmentation is nothing but the division of the organizational objectives into a substantive, or policy formulating, plan and a procedural-executory, or administrative, plan. This device, which is implicit in Davis, acts to expand the area over which the top management can supervise effectively and efficiently. At the same time, however, if the supreme coordinating authority of the organization can be segmented doubts are raised as to the operational validity of another basic principle of organization theory, that of the principle of "unity of command." In a sense, both the principle of the limited span of executive control and that of the principle of unity of command were originally developed in the military and then adopted as governing in large-scale organizations in government and in the business world.

UNITY OF COMMAND

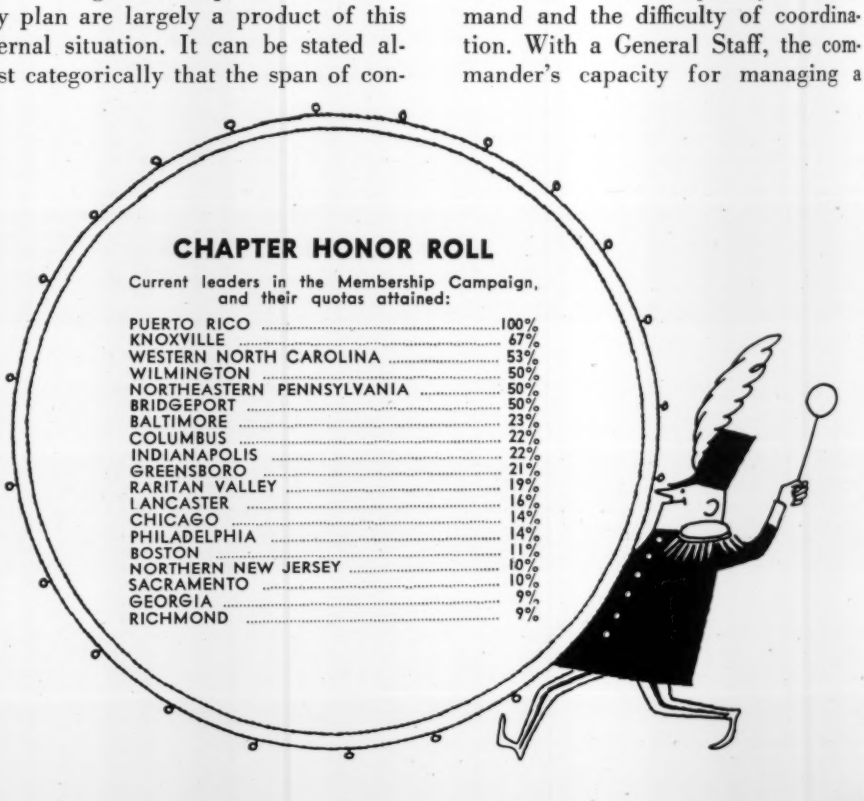
The mission of a military organization is in abeyance during time of peace and is operative only in time of war. The continuity of the military organization is provided by a hard core of elite but in time of war this hard core must be expanded many fold in order "to defeat the main force of the enemy and to seize his vitals." The process of expansion of the military, at least in most Western countries, requires that highly individualistic and yet ordinary manpower be recruited, trained, and developed into operating units during a period of emergency when time is a factor in short supply. The span of control under these circumstances is necessarily limited because the nature of military operations is such that the physical movements of individuals must be constantly integrated into the objective of the organization. At the same time, unity of command is necessary because the individual may be ordered by the leadership to sacrifice himself as an individual to further the organization objective; this requires instant obedience to one, and only one, superior. Newly created posts within the leadership must largely be filled by the more outstanding among the recruits and the marginal principle applied to the utilization of the hard core elite. To speak of a limited span of control and the unity of command in this type of an organization is to recognize that armies consist of only a small nucleus of professionals and a vast multitude of amateurs—the principles that govern the organization apply to active operations and are concerned with an *ad hoc* effort, not with a steady, continuous pull.

VARIABLE SPAN OF CONTROL

Contrast the nature of the mission of the military organization with that of the organization in which most of the elements of the substantive plan unfold as a result of deliberate planning internally generated rather than being dependent upon the unknown plans of an unknown enemy. The significant element here is that planning possesses a far higher degree of predictability within the framework of a supreme coordinating authority than when two or more organizations, each with its own coordinating authority, confront each other as opponents. The internal structure of the organization is conditioned by the environment in which it operates; the principles that govern its procedural-executory plan are largely a product of this external situation. It can be stated almost categorically that the span of control in an organization geared to operate during periods of emergency is much narrower than it is in an organization in which predictable standards can be established and where the variances from these standards then serve as the basis for corrective action.

There is a tendency in the military for the span of control to widen in time of peace—this is a result of the same circumstances that cause the layman to think of firemen as being pinochle players primarily and fire fighters secondarily.

"Pride of place" has usually won out in time of peace, resulting in far more individuals reporting to one man than he could control. Where there are ambitious subordinates, softhearted commanders, and complaisance characteristic of peacetime, "pride of place" flourishes. The awakening always comes but usually not until war or other emergency threatens. Then serious incidents in the form of grave errors, neglects, or delays forcibly remind commanders of the limitations imposed upon them by "span of control." And then, a commander realizes that as the number of subordinates reporting directly to him has become greater, the number of resulting relationships has increased not by arithmetical but by geometrical progression. It is this total number of relationships in a headquarters which in a large part determined the complexity of command and the difficulty of coordination. With a General Staff, the commander's capacity for managing a



large number of subordinates is greatly extended, but even so the limitations of "span of control" persist.[7]

PEACETIME SPAN WIDENS

Pride of place, as defined above, is but the peacetime equivalent of the wartime span of control. The organization of the Army, with its large number of scalar levels and a limited span of control, is ideally adapted to "closing with the enemy and seizing his vitals." In peacetime, the military is both an organization and an organization in being, just as the fire department is performing its organization objective when it is fighting fires. In this context, the quotation above should not be interpreted as referring to relationships increasing geometrically but rather as the renaissance of the organization objective which changes the nature of the relationships themselves. The expansion of the organization immediately changes the nature of the duties performed by each and every member of the professional leadership—their scarce knowledge must be allocated to the most pressing ends and it is out of this rapid transition that the "complexities of command" and the "difficulties of coordination" arise. Into this milieu are integrated, in a more or less systematic manner, the enlisted and quasi-military, non-professional leadership with values formed in the world of private associations where drastic change is the exception rather than the rule.

The concept of the limited span of control, developed and verified by the military, was one of the first principles borrowed from them by theorists in public and private administration and applied to non-military organizations. The principle itself was intuitively acceptable and served as a good first approximation in the formation of large, non-military organizations. The basic error that was committed in adapting to non-military situations arose from an improper appreciation of the contrast between active military, as opposed to civil, operations. The element of uncertainty in military operations is much greater than it is in civil operations whether the focus is on the quiescent stages characteristic of peacetime when the coalitions are being formed or during the active wartime phase when every plan that is developed is subject to rapid change because of a change in the plans of the enemy. The large-scale, non-military organization, in contrast to this, can reduce most of its operations to a routine requiring a minimum of detailed direction.

The mechanistic concept of the limited span of control was advanced before social scientists had become aware of the importance of primary relationships and the role that they play in the formal organization. Every formal organization can, and should be, also envisioned as a series of primary groups rather than being composed solely of isolated individuals. No matter what the purposes of the organization, this tendency of people to become members of informal groups is always at work. Mere physical proximity of people to one another is enough to bring these informal groups into existence. The successful leader recognizes this fact and utilizes it to improve the quality and quantity of coordination. Leadership ultimately is more dependent on these social relationships to attain the organizational objectives than on power that grows out of authority.

THE ROLE OF THE PRIMARY GROUP

When an organization is initially created, it can be said that the organization is based upon contemporaneous cooperation. Contemporaneous cooperation changes into progressive cooperation under the influence of time and growth—this means that the character of the relations among the members of each unit organization changes from secondary to primary in greater or lesser degree. The responses of the members of the unit organization toward each other become total rather than segmental in nature; the contractual relations which are characteristic attributes of a system of contemporaneous cooperation are supplanted by a diffuse, rather than a specific system of progressive cooperation. The nature of communication within the group becomes deep and extensive to the point that the unit organization can be said to behave as a single person. As the process continues, each individual receives more than a share of the product; he also obtains personal satisfactions which, in effect, can be numbered among the inducements and the incentives that the organization provides to participants. The primary relations act to harmonize the organization objective and the personal objectives of the participants and in this fashion the job of the management can be said to be lightened since participation in the system of conscious cooperation is no longer dependent upon pecuniary inducements alone.

The unit organization comes into being, as a component of a larger, formal organization, "when (1) there are persons able to cooperate with each other, (2) who are willing to contribute action, (3) to accomplish a common purpose."[8] One obvious aspect of the phenomenon of growth is an increase in the "nest of Chinese blocks," or unit organizations, that constitute the formal organization. An even more important aspect of growth, and its accompanying increase in differentiation and specialization of contributors, is its impact upon the people who constitute the unit organizations. This facet of growth can be termed an efficiency of scale of organization since it operates to bring together people of a similar background into a specialized unit organization.

The process of selection of the membership of the specialized unit organization tends to become institutionalized in that recruitment is limited to people with the requisite skills acquired through a common or similar education.[9] On

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[7] *Otto L. Nelson*, National Security and the General Staff, (*Washington: Infantry Journal Press*, 1946), *p.* 579.

[8] *C. I. Barnard*, The Functions of the Executive, (*Cambridge: Harvard University Press*, 1938), *p.* 82.

[9] *Cf., R. Bendix*, Higher Civil Servants in American Society, (*Boulder, University of Colorado Press*, 1949). *This is a penetrating "study of the social origins, the careers, and the power-position of higher federal administrators."*

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the one extreme, this uniqueness is assured by the establishment and maintenance of special schools and seminaries operated under the control of the leadership of the organization; they serve both as means of developing primary relations through the inculcation of common value systems and as means of insuring the perpetual succession of the leadership function. On the other hand, a similar educational background often serves the same purpose as far as the unit organization is concerned—the recruit is accepted because he possesses the requisite training and this is assumed to provide the necessary motivation and loyalty. Initiation is dependent on certain formal attributes which can be analyzed as constituting the skills required to fill a certain organization office; acceptance is dependent on admission as a whole or total person and occurs only after a period of probation. The problems of coordination of the formal organization are reduced by the employment of the unit organization as the basic component of the formal organization. Communication, willingness to serve, and the organization objective are all more easily accomplished once the organization's strategic role is recognized.

LESS WORK FOR EXECUTIVES

The unit organization provides the framework in which secondary, contractual relations become socialized and develop into primary relations. Primary relations, in turn, result in the development of primary groups; the primary group has some vaguely defined upper limit, and if it is to be used as a tool to aid the leadership to maintain the system of conscious cooperation, then the unit organization should also be limited in the number of members to be included in it. Note, however, that this limit is not as rigorous as that established in the Graicunas-Davis hypothesis. Rather than resulting in increased demands on the time of the superior, informal grouping reduces rather than increases the number of cross and indirect group relationships that the superior must consider. If the executive group is small and composed of congenial and like-minded persons, it can be said to function as the alter ego of the chief executive. A small, compact and intimate group will require less coordination of its own coordinating activities by the chief executive than a large and motley array of individuals.

The principle of the limited span of control is valid only if it is granted that the limits to be the size of a system of cooperation are ultimately dependent upon the capacities of one individual. This assumption itself is paradoxical because it implies that coordination, however defined, can only be the product, in the last analysis, of the abilities and knowledge of that individual. This in turn hinges largely on Western beliefs about individualism—but need there be any more reason to believe that systems of cooperation depend upon individual abilities than to believe that they are not even possible because individuals are individuals and will always behave as such? It can be argued, and is in many of the social sciences, that human behavior is as much communal as it is individual; if this is granted then it can also be argued that supreme coordinating authority can be vested in a group as well as it can in an individual. In turn, if the group concept is admitted, much of current theorizing about the optimum size of the formal organization requires re-examination. "Either because the scientific knowledge of human relationships is not available (which in the past has been to a certain degree the case), or because of failure to apply scientific knowledge which has been developed (which is more nearly the contemporary situation), scientific management fails on at least one count to be adequately scientific."[10]

GROUP COORDINATION

The formal organization by virtue of its existence must have a supreme coordinating authority—and if experience has any lessons, it is that the source of the authority should be centralized. This, however, need not, and does not, imply that authority must be vested in a single individual, except to define the responsibility for results; it merely implies that the substantive plan developed by the leadership is accepted as the basis for action within the organization without question on the part of those participants subject to the authority of the organization. Given this frame of reference, the span of control is not given by a mere counting of arithmetical and geometrical progressions and assuming that when some limit is reached that coordination ceases to be effective. Theoretical relationships, such as those developed by Graicunas and Davis, posit either a system of continuous conflict or of detailed control of the individuals comprising the organization rather than a system of continuing cooperation. If the system of authority does not serve its function, then the Graicunas-Davis limits are relevant since they indicate the maximum of possible exceptions that may require a decision on the part of the superior.

If, however, informal groups can serve as a means of facilitating coordination at the operative level, then the apparent escape from the dilemma of the limited span of control is the argument that if the supreme coordinating authority can have its locus in a group, rather than a single individual, it becomes indefinitely extensible. If this is the case, there is no limit to the size of any one formal organization since the "factor of coordination" is then in elastic supply to the organization and can be expanded to meet needs of the organization occasioned by increased size. In one sense, this is the purpose served by the hierarchical, or military organization. The division of the common purpose of the organization into a substantive plan and a procedural-executory plan also serves to meet this purpose. Such structural and philosophical devices, however, supposedly collide with the principle of unity of command; "In building a structure of coordination, it is often tempting to set up more than one boss for a man who is doing work which has more than one relationship.... The rigid adherence to the principle of unity of command may have its absurdities; these are, however, unimportant in comparison with the certainty of confusion, inefficiency and irresponsibility which arise from the violation of this principle."[11]

The concept of a single person as the supreme coordinating authority in a system of conscious cooperation was first enunciated by Louis IX—it includes "promptness of decision, unity of command and strictness of discipline."[12] As is true with many of the principles of administration, the empirical evidence that the principles of unity of command depends upon one person as the locus of the supreme coordinating authority, is extremely scarce. There is no question that formal organizations, and most informal organizations, possess authority by virtue of their existence—but the argument that all decisions depend ultimately on the decisions of one person is difficult to support on any logical basis.

COMMAND IN THE FAMILY?

The basic unit organization in modern American society is the family, which by its very nature, cannot possess a supreme coordinating authority resting in one person. Yet household decisions are made and quantitatively constitute the most important decisions in society. The nature of the family is such that "in general, the more detailed regulation of the kinship system is left for diffuse cultural standardization, not enforced by a formal social organization."[13] Household decisions, due to the cultural nature of the family, are made by various members singly, or are joint decisions, and are translated into action without being channeled through a higher authority. Custom and tradition largely delineate the area in which the husband and wife (and other members) make decisions.[14]

The family shows every evidence of enduring as the basic unit organization of society; can it also be considered as an exception to the principle of unity of command? At one time the family constituted the unit organization in production—did it suffer in efficiency from a lack of unity of command? Or is the principle only operative where the relations of the participants to one another are secondary rather than primary, i.e., is applicable only to those organizations whose operations are conducted rationally (formal organizations)? It can, of course, be argued that family decisions

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[10] *William E. Moore*, Industrial Relations and the Social Order, (*New York: The Macmillan Co.*, 1946), *p.* 187.

[11] *L. Gulick*, Papers on the Science of Administration, *op. cit.*, *p.* 9.

[12] *Robert Michels*, Political Parties, *trans. E. and C. Paul* (*Glencoe, Illinois: The Free Press*, 1949), *p.* 41.

[13] *Robin M. Williams, Jr.*, American Society, (*New York: Alfred A. Knopf*, 1952), *p.* 45.

[14] *Cf., Williams*, ibid., *p.* 56, *for the following discussion of the decision-making process in the typical family: "For any aggregate of persons becomes a real social group only by being identified as a unit, by sharing a common set of experiences, and hence by sharing a common universe of meanings and symbols. . . . Not even in theory is the wife expected to render unquestioning obedience to her husband, much less in actual practice. The marriage relationship most commonly held up as a model is one in which joint decisions are reached. It remains true that general consensus still holds that in the last resort the husband should be 'head of the house', but it is felt that only in rare circumstances will 'patriarchal' rather than 'democratic' processes be desirable."*

considered individually are confused, inefficient and irresponsible but that they are rational in the aggregate. Or, the argument can be advanced that the purpose behind a continuing family relationship is the preservation of the organization and that the decisions made in the household are weighted as to the effect they have on this objective. From this, it follows that the family can be considered as having both a substantive and procedural-executory plan very similar to that of the formal organization. Because the family is usually limited in size and its members are not highly specialized, coordination is obtained largely through informal means. In other words, where the primary group relationships are present the organization can be said to act as one person.

GROUP AUTHORITY BASIC

From the analogy to the family, the supreme coordinating authority can be regarded as existing in either a single individual or in a group of people. This, in turn, indicates that there are two ways of analyzing authority. It can be regarded as having its locus in a single individual; this can be described as the technical or formal concept of organization such as is typically conveyed to the mind in military organization; relations among members are secondary, associational, *Gesellschaft*. The other is to analyze authority from the primary, communal, *Gemeinschaft* approach; "where the members of a social aggregate hold ultimate convictions in common, there is a cohesion capable of overriding otherwise disruptive conflicts over scarce means-values."[15] This is the *alter ego* concept of the executive group; coordination does not depend solely upon one individual but is shared in much the same manner as in the household situation. Individual value systems are similar and membership in the executive group is really a projection of the personality of the peak coordinator; coordination is a product of group action.[16]

Implicit in the "executive group" concept are a number of interesting hypotheses which can not be explored in detail here. If it is granted that coordination can be secured as the result of group activity, then the traditional principle of the span of control as a factor limiting the size of the organization requires careful re-evaluation. One of the fundamental advantages of the large, formal organization, if the executive group concept is valid, is the replacement of the single individual as the supreme coordinating authority by a group.[17] To the extent that the formal group develops primary relations among the members problems of coordination will be further minimized.[18] From this

[15] *Williams*, ibid., *p.* 343.

[16] *R. A. Gordon*, Business Leadership in the Large Corporation, (*Washington, D. C.; The Brookings Institution*, 1945), *pp.* 317-18, *who makes the following statement about the character of coordination in commercial organization; "When we speak of the 'executive group', the second of these two words needs to be stressed. The chief executive is the most important single figure in the large corporation, but he is only one of a sizable body of professional managers who individually and collectively make the decisions and provide the coordination that gives unity and direction to the firm's activities."*

[17] *The concept of the executive group as the supreme coordinating authority of the large organization is best embodied in the General Staff concept. The following quotation from Major General Otto L. Nelson,* National Security and the General Staff, *op. cit., p.* 573, *expresses current Department of the Defense doctrine about the role of the General Staff: "Thus, while the General Staff does not absorb any of the prerogatives of command, it owes its existence to the fact that size and complexity of organization and the problems resulting make it physically impossible for any one person to do all the planning, coordinating, and supervising indispensable to intelligent command. To perform these tasks the commander of any large unit must have a General Staff which as a body acts as his* alter ego, *greatly enlarging his capacity to command but without taking away from him any of his attributes of command. Thus, the military doctrine constantly emphasizes the fact that the General Staff officer has no right of command. Considering the General Staff to be the commander's* alter ego *does not preclude sensible specialization on the part of its component parts. Thus, there can be and there is considerable specialization in the performance by the War Department General Staff of its tasks of planning, coordinating, and supervising."*

[18] *In contrasting capitalism with state socialism the following point is developed by S. A. Lewisohn,* Human Leadership in Industry, (*New York: Harper and Brothers,* 1945), *p.* 19; *"In any particular enterprise a group is given a free hand to initiate, plan and execute.* In forming such groups, individuals are able to find congenial and like-minded partners.

"One of the disadvantages of state socialism in this respect is that, in any particular administrative office, men are jumbled together who may not think or feel at all alike. Yet they must conform to the state pattern. Consequently, there is difficulty in achieving the type of executive initiative and teamwork that is secured under a decentralized capitalist organization." (*Mr. Lewisohn is President of the Miami Copper Company and a past president of the American Management Association.*) (*Italics supplied*)

General Nelson, National Security and the General Staff, op. cit., *p.* 583, *argues that the size of the General Staff should be limited: "For a general staff to function as the* alter ego *of the commandant and do for him many of the tasks which he would do for himself if time permitted, it is imperative that a general staff be a small, compact and intimate group."*

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point of view, the large organization can be characterized as a more efficient administrative structure than the small organization that is oriented around a single individual. At the very least, the traditional definition of coordination as an ambivalent concept-division of labor is posited as the basic factor in social progress, while, at the same time, the intimate coordination that makes division of labor possible is held to depend upon certain strategically placed individuals.

CONTRADICTORY PRINCIPLES

The development of large-scale organizations has followed an historical pattern of continuing experimentation with structures and procedures to cope with the problems engendered by increasing size and attempting to insure the survival of the organization. Leadership in the technical and procedural aspects of organization was transferred from the non-profit organization to the commercial organization as a result of the "scientific management" movement which dates back roughly to the turn of the century whereas the leadership in the sociological aspects of organization has remained with the non-profit organization. The theory of organization that has developed has not been built around any general frame of reference but has rather emerged as a series of principles of administration.[19] Many of these principles contradict each other and have never been verified in any empirical way. Administrators have applied those principles that were applicable to their own particular situation ignoring those that were contradictory to the ones applied.

Despite the arguments of organization theorists, there is as yet no integrated body of theory because the "sciences" of organization and administration can be approached from any number of directions. Even a preliminary survey of the literature would require an extensive exploration and integration of such varied areas as anthropology, business administration, economics, education, history, law, philosophy, political science, psychology, and sociology. Such a task is beyond the "span of control" of any one individual. As a result, much of the theory of administration and organization is still in a very rudimentary stage of development and the results of research in one field are often opposed to the results discovered in others. In practice, however, the leadership of an organization is confronted by an organization objective and has to mold around it a structure and a procedure. With the increase in the size of organization, "rational experimentation with new methods" has been the practice—procedures and structures have been adapted to the requirements of the situation employing those principles that carried the most weight.

The reason why organization theory is a compound of so many paradoxes arises from the historical development of the social sciences. On the one hand, in many of the social sciences the importance of the individual has been stressed—in economics it appears as "economic individualism." The division of labor results in specialization and the latter permits the individual to channel his abilities in whatever direction his desires may lie: "It is not enough simply to note the fact that specialization is rampant in our society. We must note also the fact that in general it is believed in as a postive good."[20]

INTEGRATION VS. SPECIALIZATION

Opposed to the principle of specialization or differentiation in the organization is that of integration. The simpler the organization the easier it is to obtain coordination yet the imperatives of survival and growth demand the use of the large organization: "*the extent of useful division of labor is intimately related to the size of the establishment or complexity of the industry as a whole. Thus, as a general rule, the larger the concern, the greater the possible degree of specialization.*"[21] As the degree of specialization increases, common values are held to result in the splintering of the unit organization. Primary relationships tend to disappear and this, it is argued, mitigates against the usefulness of a continued differentiation of function.

The leadership of the non-commercial organization does not have recourse to the alternative of the market place as the basis for the construction of a system of coordination. The system of coordination must base its sole reliance on a structure and a procedure to implement the organization objectives. In order to establish and maintain authority, the leadership of the organization will order the structure and the procedure so that it possesses the quality of predictability. Without predictability there can be no coordination and without the latter the "system of governance" perishes. The dichotomy of specialization versus integration is not solved by seeking an optimum size of the organization; rather rational techniques and structures are sought which will permit efficient expansion.

SPAN OF CONTROL INVALID

The gist of the argument advanced here is that the span of control is no longer a valid principle of organization in view of the advances that have occurred in those social sciences that relate directly to administrative theory. The emergence of the primary group concept leads logically to group coordination. The role of the chief executive becomes one of securing cooperation in the pursuit of the organization objectives, *i.e.*, he coordinates the efforts of the coordinating group. However, the institutionalization of the organization and the development of primary relationships among the members of the executive group together provide such a high degree of control that the area of effective supervision of the chief executive is much wider than that predicted by the span of control principle.[22]

Due to limitations of space, we have not attempted herein to develop the theories of permissive authority and substantive decentralization which are closely related to the concept of group coordination. Substantive decentralization is defined in its application to the commercial organization as a return for control purposes to the price mechanism with the efficiency of the substantively decentralized divisions measured on a profit and loss accountability basis. In the non-commercial organization, substantive decentralization is probably dependent on the adoption of a system of performance budgeting. In a later analysis, an attempt will be made to relate the widened span of control to the theories of permissive authority and substantive decentralization. •

[19] *In Alvin Brown* Organization of Industry, (*New York: Prentice-Hall, Inc.*, 1947), *pp.* 1-8, *there are listed* 96 "*principles*" *of organization.*

[20] *W. E. Moore,* Industrial Relations and the Social Order, op. cit., *p.* 65.

[21] Ibid, *p.* 64.

[22] *For additional evidence on this point, cf. C. L. Shartle, "Leadership and Executive Performance",* Personnel, (*March,* 1949), *pp.* 370-380; *John M. Pfiffner, "The Third Dimension of Organization",* ibid., (*March,* 1952), *pp.* 391-399 *and James C. Worthy, "Organizational Structure and Employee Morale"* American Sociological Review, (*April,* 1950), *pp.* 169-179.

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Money As An Industrial Cure-All

by King MacRury
Industrial Relations Consultant
Andover, Massachusetts

Have some managers created the tail that literally wags the dog with their set conviction that money can solve all personnel problems? Arguing that financial incentives are far down on the list of employee motives, citing cases where grievance due to other conditions are often disguised as financial, holding that management's attitude may encase bargaining in a financial strait jacket, the author suggests other ways for management and employees to reach an understanding.

THE new Ford and General Motors contract settlements appear to support the contention that "the country has gone money-mad." But the implications and basic motives leading to such demands are more subtle. For years industrial employees have fought a battle for living wages. And their efforts have been so successful that every job today offers an atractive standard of living.

None of the individuals or groups who formulate the pattern and policy of wages and salaries is ignorant of the effects of general increases. The advantages to any individual or group are in the differentials of wages or salary which it attains for itself. So an increase which becomes too widespread is merely theoretical progress. The interest of all concerned, therefore, is to stabilize their gains on a relative basis.

After the tremendous wage rate adjustments of the war years, compensation demands matured and a shift of emphasis became apparent. First it took the form of demands for pensions and other benefit plans. And now negotiations are aimed directly at stabilization and security, through guaranteed annual wage programs.

Guaranteed annual wage plans and other security and benefit programs are an invitation to industrial management to long-range financial planning. And, as Walter Reuther indicated, these should focus thought and effort on stabilization of markets and production.

The outlook of management which a few years ago believed that all personnel problems could be solved through compensation, has created the tail that literally wags the dog. It is interesting to see how this has come about.

When narrowing profit margins signalled the need for management replanning there were four obvious alternatives to solving the problem: general cut-backs; reduction of wages and salaries; specific retrenchments; or more long-range development through analysis, replanning, and diversification.

Among operating executives who elected economies in wages and salaries, many were appalled at the lack of cooperative response among wage earners and salaried personnel. Some firms received demands for increased compensation, even in the face of corporate crisis. Concerns which made cuts in wages and salaries met resistance, turnover, and decreased productivity. Several chief executives remarked on the lack of worker loyalty and the centering of employee interest "solely in the paycheck." And many of these were the same leaders who, a brief time before, concluded that all discontentment could be cured by increases in wages; their theory, therefore, seemed to be borne out.

But this was an erroneous conclusion, and like most such generalizations, it could be bad for a company's outlook and well-being. Investigation, analysis and introspection show that the problem is by no means as superficial as this. Nor is it chronic or insoluable. Harmonious human relations are the result of sound philosophy, effort, and practice. And lack of mutual comprehension and flexibility signals an unhealthy condition in which the need for appraising and re-evaluating basic objectives and provisions is indicated. And sometimes the very nature of such misconcepts is the key to corrective possibilities.

Human relations must start with determining and providing what employees want and need. Unfortunately, this purpose often is not clear in the programs through which human relations is administered. Programs and provisions vary in type and nature, following the dictates and demands of line

management or the special qualifications and interests of industrial relations officials. Since these influences, in effect, formulate the purposes, ramifications, characteristics and limitations of company programs, whether or not an industrial relations program is achieving its objectives can only be measured in these terms. If, then, the objective is too narrow to adequately serve the company's best interests, it is inevitable that the program, also, will be too narrow. Or, in other words, a program may be effective within the confines of its objectives and still be inadequate for company needs and problems.

The objective of some such programs may be given as "the providing of a workplace which attracts and retains employees who have suitable attitudes, character and qualifications for harmonious production." But this is not enough. This objective may be fulfilled but desired results still not accomplished until public and community relations have been amply propagandized throughout the area from which employment candidates are to be secured.

BROADENING RESPONSIBILITY

Thus we have an indication of the need for public and community relations. For media outside the company —as well as the interest and participation of non-company people—are necessary to make it work. Then, when the adequate climate and comprehension have been established, there is still the problem of ensuring that the requisite basic, pre-employment training and skills are available in the labor market.

Once persons are employed, it is obviously necessary to do more than give them money. They must be given incentive, challenge and stimulus to expend more than a modicum of effort and to enhance the skills and abilities which make them promotable.

In other words, the successful human relations program combines the participation of many people of diverse interests. And the key to industrial relations accomplishments is in the attitudes, interests and practices of line managment.

The initial concept of industrial relations as a strictly service function has necessarily broadened to become an essential philosophy for all general management. No longer an isolated facet of operations with specific campaigns and assignments, it is a practicing technique for all phases of executive and supervisory activity.

For these reasons it is of twofold importance that objectives be known and understood by all supervisors and executives, regardless of their primary technical responsibilities. Such general understanding is necessary before the outlook of management can be broad enough to encompass the potential contribution of human relations programs; characteristically, no more will be noticed than is demanded or expected. The modern concept of human relations practice directly involves the manner and mien of employees at all levels, and supervisors and executives share in its promulgation.

Human relations administration therefore cannot be relegated to the efforts of a limited professional staff. To the contrary, it is a measure and large share of the responsibility of all, merely under the technical guidance of the industrial relations department.

Erroneous conclusions as to employees' real motivations have created a fearful monster. To cope with it, management must reflect on its over-all dimensions and meaning, and must understand the part which they themselves have played in its creation. For from this understanding comes appreciation of what employees really want, what their motivations and meanings imply. And in this there are patterns for solving problems to the best interests of all.

Since the objective of human relations programming is to create provisions and an atmosphere which will influence employees toward efficient, harmonious and productive accomplishment, it is first necessary to diagnose and understand the basic attitudes and interests of employees. And in such an investigation, there are certain obvious and inevitable guideposts which delineate the role and responsibility of the industrial relations staff from that of operating management. Perhaps through it a company can broaden the scope—and thus the measure—of employee interest and work satisfaction.

MONEY AS A BASIC MOTIVE

To understand basic motivations, it is necessary also to take into account influences—or "training"—and to go deeper than the superficial appearance of employee relations problems. Those who subscribe to the theory that compensation is the paramount interest of employees are dealing with superficialities, and will find authoritative conclusions to the contrary. For example, the National Industrial Conference Board years ago conducted research into employee wants. Their conclusions, like those of the more recently published findings in the United States News, ranked money low—about seventh—in the objectives of workers at all levels.

Unrelated grievances often are masked in financial guises. One illustration is found in demands made by a group of women in Company A for a wage adjustment. Management knew that wage rates for this department were equitable. But, believing in the doctrine of financial interest and appeasement, they were prepared to grant it.

Fortunately, an astute union representative reminded management that eight potential demands of a similar nature were outstanding, and that favorable action on this grievance would make the others valid. So unusual care was taken to explore justification of the demands.

The answer was found in the unrest and poor health of the group. Structural and process changes in an adjoining department had incurred new health hazards. These, in turn, had resulted in increased illness and absenteeism. And the constant discomfort under which these women were working caused them to be irritable and to complain; their general dissatisfaction was misconstrued as financial.

MONEY NOT A SOLUTION

More often the fallacy of economic interpretation is less clear; many executives have been guilty of ignoring other signs, and trying to solve problems solely through compensation adjustments. For example, one firm which faced labor shortage and a high rate of absenteeism offered a bonus for perfect attendance. Over a period of time, the pattern of absenteeism remained virtually unchanged; former absentees and "offenders" were unaffected; the majority of bonus payments were made to people who normally maintained perfect records of attendance. The real fault lay in the fact that daily and weekly work schedules were excessive in this particular concern. To cut down on absenteeism and substantially increase production it was necessary to reduce the hours of work. Here again, simply money was not the answer.

This type of experience was especially common during the war, although causative factors often varied. Shopping problems, home and domestic problems, general dissatisfaction, each were paramount in different situations. Yet, though these factors were well known to the

workers themselves, the hit-or-miss utilization of financial panaceas were continued by an oblivious top management. And in so doing, management has led employees to think in financial terms, rather than job problems and work satisfaction.

Inevitably the weaknesses of this approach are demonstrated in long-range ineffectiveness. But over a period of years, this has led to a situation which is far more important, basic and far-reaching than simple ineffectiveness. For management has been emphasizing a belief in money exclusiveness. Whatever excessive money interest does currently exist among employees inevitably is due, in part, to managements' credo of compensation as the crux and solution to all human relations problems. It is the effect of this thinking that we are feeling so acutely today.

Some executives are prone to blame their failures in human relations on unions or unionism. They say, for example, that union membership "implies a division of loyalty," or that union influence, emphasizing money demands, causes company-employee relations to settle into a merely financial affinity.

Worker affiliations should not run contrary to the interests of an employer. And certainly trained union representatives believe in the principle of profitable operation; therein lies the security and well-being of their members. So it can be generally assumed that the principle of unionism—and its usual application—is not in conflict with company operation or with employee loyalty.

THE INFLUENCE OF UNIONS

There are other factors in the employer-employee relationship in which unionism is vastly more significant. For example, collective bargaining often degenerates into an argument in which both "sides" endeavor to reach mutual accord on "what the traffic will bear." Actually it is often management which exerts the greatest influence toward making compensation arbitrary and abstract —unrelated to the profit picture. Yet the industrial leaders who believe most heartily in divorcing wage rates and job pricing considerations from company income are often the ones who are the most disillusioned by workers' inability to comprehend the wage-profit correlation when used as a foundation for curtailments. A surprising percent of industry line management endeavors to maintain compensation on an abstract and arbitrary basis. This, like the current misunderstanding of the change from "cash" to "security" demands, is one of the most serious forms of underestimating employees, and of "talking down" to them.

There is another aspect of company-employee relations which must be borne in mind when evaluating money interests of employees from among the topmost demands of the union. First, of course, is the fact that the widest range of decisions affecting employees still remain the prerogative of management. So the emphasis on economic issues by the union is based on the fact that the union has a much narrower range of management responsibilities under its bargaining jurisdiction. But also it has been historically true that agreement can be reached between union and management on compensation matters much more readily than on other factors coming under mutual discussion. Probably this is due to the fact that they are specific and can be more easily discussed and decided.

SOME NEUTRAL INFLUENCES

Communication, representing the clearest means for divining employees' real wants, serves well to indicate the error of omission. In a sense, a good communication program enables the employer and employee to take each others' pulse. Communication between employees and management has been widely accepted as the instrument for establishing and maintaining mutually pleasant and profitable work relationships. And there is considerable deference paid to the admonition of specialists, that such a program must undergo a long period of assimilation and development before becoming fully effective. Nevertheless, when there is need for quick stimulation of the workforce, many companies decide in favor of immediate financial incentives, without adequately exploring the reasons underlying apathy, turnover, or lack of employee effort.

Or, in adopting "new communication programs," relatively few concerns carry through with the ideology and philosophy of the plans they have devised. Company B obtained the services of a well-known marketing specialist, whom they designated as vice president in charge of communications. They approved a fantastic budget, and authorized their new official to staff his department with high-priced, well-qualified public relations and journalistic personnel. What actually they had approved was a program of propaganda, rather than communication.

Line executives were absolved of further responsibilities for communication. For the staff of the new department prepared, addressed and mailed excellent journalistic gems routinely to the homes of workers, supervisors, executives, priests and police. And it took two years to find that these fine communications were drab, uninteresting and unrelated to the employees for whom they were intended, whose actual questions and information needs they ignored. Furthermore, they were extremely harmful to the status of line executives and supervisors, whom they bypassed.

Company C, on the other hand, installed a less costly program which integrated and coordinated training, meetings, recreation and written media with research, and utilized the efforts of people in every strata throughout its plants. Its success emanated from the principle that communication programs must be based on diagnosis of information needs,

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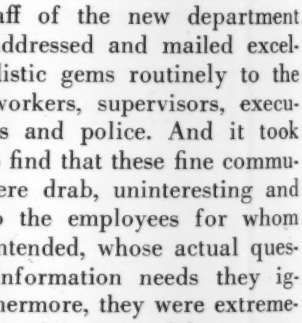

and must so stimulate the participation of employees at all levels that communication becomes a working instrument for all. It seems so relatively simple to formulate decisions on the basis of precedent and procedure that we often ignore the real factors for conclusions and decisions, in an effort to expedite and hurry results.

In spite of the excellent research which has been conducted into employee motivations it would, of course, be possible to assemble isolated bits of information to confirm or deny the fact that money is the paramount stimulus. Surveys themselves are not infallible; they may be unintentionally designed in a manner which does not give depth to findings, or adequate investigation of alternative conclusions. However, through research and logical analysis there is frequent and widespread substantiation for the fact that "money" is normally a secondary reaction; or it is something selected as a demand or reason when facts pertaining to unrest are obscure, seem relatively unimportant, or are of a nature which do not appear negotiable or on a ground for mutual accord.

VARYING MOTIVATIONS

Company D is a steady employer, located in an area principally populated by seasonal industries and concerns in which strikes, unrest and dissatisfactions are rampant. Fifty percent of its applicant file is taken up by well-paid key personnel of other local companies. Carefully questioned on their reasons for wishing change, these people indicated a search for job security. To many of them the change would mean monetary sacrifice and lack of promotional possibilities for as long as ten years.

Security ranked unusually high among workers' interests in this area. But this does not in any way belie the research findings which indicate security as a much lower-rated worker motivation. Instead it illustrates the degree to which the normal pattern of employee objectives can be influenced by outside conditions.

In the case of Company D, the motivations were direct, reasonable and understood. The management of Company E, on the other hand, faced a somewhat more obscure problem when a poll of worker opinion indicated a surprising dissatisfaction with wage and salary rates. In fact, the personnel of this concern were among the highest paid in the community. Benefit plans compared more than favorably with those of competitive firms.

Results of further study showed that employee restiveness stemmed from poor internal personnel practices. Dissatisfied workers—"shopping" for new jobs—reached erroneous and unfavorable conclusions with respect to their pay plans and rates. Nevertheless, the basis for adverse attitudes did not emanate from monetary considerations, but because the wage and salary administration program was informal, poorly defined, and little understood. Wage and salary rates became a common denominator which employees felt they could most readily compare.

Conversely, the personnel of a competitive company in this same community indicated satisfaction with existing rates —or, more accurately, lack of active awareness of rates paid and differentials at other local establishments. The fact that their wage and salary rates were substantially lower than those of competitors did not come under scrutiny. For workers were basically satisfied with personnel practices, company relationships, and the clear and comprehensible programs of promotion and wage and salary administration. The crux was that they respected their bosses, and believed in their fairness—a belief which could not have been inculcated through the efforts and activities of a staff department of industrial relations specialists, working independently and apart from line management.

Management often unfavorably compares the output, performance and attitudes of present-day workmen with those of twenty-five or thirty years ago. But within that era there have been fundamental changes. Technological improvements have increased the need for skilled employees. So, to keep pace, selection standards have been continually revised in order to secure and develop men and women with greater technical competence.

THEN AND NOW

Although these more exacting requirements have been reflected by a comparable rise in compensation, this alone does not alleviate the problem which has been created. These new skills demand a higher level of training and education. And naturally the revised thinking of this type of employee includes greater awareness of company benefits, of job stimulus and incentives, and of non-financial compensation, as well as money itself.

This fact is both a bane and blessing. Bane because employee effort and output are inseparably associated with mutual understanding. Blessing because competitive and technological advance ties success more concretely to thoughtful productive effort. In any event, there is created by this more exclusive selectivity a debt for closer equality—which means that company integration and communications through industrial relations are indispensable, not just tax deductions, embellishments or academic theories. And they must reflect the manner and mien of all those who direct the efforts of the "do-ers."

CONCLUSIONS

Peter F. Drucker, recalls a depression thesis of General Wood of Sears-Roebuck—that there is an absolute minimum income on which an employee can live.[1] Wages below that minimum are contrary to public interest. It, therefore, behooves managers to make higher wages an opportunity to bring about better performance at lower costs—through better selection and training of employees, through lower turnover and higher productive effort.

Below this amount, the relative interest of workers in money is necessarily heightened and distorted. But allowed to follow the natural pattern, compensation alone is not the uppermost motivation. It is important, therefore, that management neither create unusual money motivation, nor reflect by their decisions and attitudes that compensation is the only ground for mutual understanding.

The superior training and education which is demanded of the present-day workforce has eliminated the margin of social distinction between management and white- or blue-collar subordinates. To think differently is to interpose an unreal demarcation which ultimately leads to fallacious judgments of the wants and motives of employees.

Loyalty, work stimulus, incentive toward effort, and the progressiveness of ideas hang in the balance. For as competition becomes keener, it will be increasingly apparent that corporate profit and security require the thoughtful application of employee effort. And this can be achieved only through the mutual understanding that is found in mental and social equality, and the free-flowing interchange of ideas, opinions, and objectives. •

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1 *"Responsibilities of Management", Harpers Magazine, Nov.* 1954; *pp.* 67-72.

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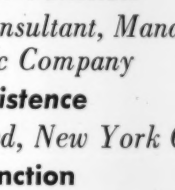

CONFERENCE

NOVEMBER 3-4 • NEW YORK, N. Y.

LOUIS J. CANTONI joined the General Motors Institute staff in 1951. He teaches psychology and leads conferences in human relations. His former jobs were as a psychological counselor and a psychiatric social worker in Detroit, Michigan, and as a personnel manager with Johns-Manville Corporation in Pittsburg, California. After taking his A.B. in philosophy at the University of California, he received a Ph.D. in education and psychology from the University of Michigan in 1953. Dr. Cantoni has read papers before professional groups and has had numerous articles published in psychology, personnel, engineering, education, and philosophy journals. He has conducted programs in reading improvement for General Motors Institute students and for supervisors in General Motors.

Who Dares to Sit and Read?

By Louis J. Cantoni
General Motors Institute
Flint, Michigan

Memos, reports, letters, pamphlets, magazines, books! How many hours a day do you have to read these in order to get your work done and keep up in your field? The factors which retard reading are analyzed — the number of fixations, and the extent of regression and subvocalization. A way to improve your critical reading is given and a selected bibliography if you wish to better your reading ability.

IN OUR day the people who do the most important jobs are those who spend a considerable portion of their time sitting and reading. Businessmen and industrialists, statesmen and scholars sit at desks and manipulate journals, reports, and papers. Researchers and technicians sit at tables and benches and have their data and schedules before them. Many of these people sit and write accounts of their work and experience for readers who in turn sit and read their reports, articles, and books.

To keep abreast of new developments and to help mold the future of his society, the intelligent person must read. Reading is the one process which can feed the mind rapidly and continuously with clear, well-rounded ideas. Actually, reading is the most intense mental activity of which the human being is capable since more ideas are taken in and evaluated per minute in this activity than in any other.

If so much depends upon the act of reading, why don't Americans read more —and better? No doubt there are many reasons. One reason is that many people have come to rely upon radio and television as sources of information. But to date these media have provided little better than a sketchy outline of developments in world affairs. Another reason lies in the persistence of the frontier tradition. In their unceasing drive for physical activity many Americans behave as though the old frontier still existed. Certainly it is accepted and popular to be the kind of person who does things which have immediately tangible results. But the new frontier is that of social relations and of technological change, and the need is for persons who temper action with understanding and sound judgment. To meet the challenge of this new frontier, one must have the courage and the stamina to sit and read.

In literate America the problem facing most adults is not to learn how to read but to do a more efficient job of reading. Reading is a habit and a skill, and better reading habits are the result of improved skills. In reading, as in other endeavors which require the development of skill, there are principles and techniques which, if understood and applied, can help the individual. Let us look at some of the most important of these.

Reading is no more instantaneous than thought is instantaneous. It takes time to think, to make associations. With education an individual's thinking process can be smoothed out, speeded up. Associations come surer, faster. But thinking can actually be obstructed by the special demands which reading makes upon thinking. Better reading habits acquired through training and practice sharpen the thinking which should accompany reading.

Often the poor reader is an individual with emotional problems. This is not to say that becoming a better reader automatically resolves personal problems. Nor is the reverse true—that the resolution of emotional difficulties automatically enhances one's reading ability. But it can be argued (and there is plenty of proof to substantiate the claim) that when an individual wants to be a better reader, attempts to incorporate the necessary principles and techniques, and also tries to recognize what role personal reasons play in his undesirable reading habits, then he can begin to read faster and with better comprehension.

It is generally believed that the more intelligent people are naturally the better readers. Recent studies, however, have shown that many intelligent people are actually mediocre readers. It is

purely a matter of not having the reading skills. Before training, our method of taking thought from the printed page is based upon habits established in the first six or eight years of schooling. Many mature, intelligent people are still using reading habits established at the sixth grade level.

THE FIXATION

Reading is done in a series of separate momentary stops or glances across a line of print. These brief pauses are called fixations. A reader with grade-school habits fixates seven or eight times across a twelve- or thirteen-word line. He is doing a "middling" job and his reading rate may range from 200 to 250 words per minute. After training and practice spread over a period of several weeks, the same reader can make better associations of ideas with three, and perhaps two, fixations across a typical line of print—with a resultant reading rate of 400 to 600 words per minute.

The trained reader plunges into the printed page—using a rhythmic fixation pattern, taking in meaningful groups of words, swinging economically from one line to the next—and gets out. Why dawdle over half-ideas? What is desired is a clear perception of the author's thought, whether informational, critical, or merely amusing. The efficient reader puts greater purpose into his speed and, as a result, has better comprehension of the material.

To regress means to travel again over ground already covered. In reading, a regression may be made to the last word or phrase seen, or to a portion of print which was seen sentences, paragraphs, or pages ago. Valuable reading time is lost in regression. Beyond this, it is a sure indicator of faulty comprehension. Checking back is very often an admission that the vital flow of the writer's main idea has been lost.

Why do people regress in reading? There are at least two important reasons.

The first stems from lack of vocabulary adequate for the type of reading at hand. It takes a systematic attack to increase one's word power. If we are trying to produce new ideas, we are always reaching for new words with which to express them. In reading related to our work, whether memos, directives, or journals, we have an opportunity to learn new concepts and new words that help us toward improved job performance. Off the job, as we read for relaxation and enjoyment, we can easily enrich our general vocabulary by making a mental note of unusually expressive words and phrases. Some books on vocabulary building provide a delightful change in our pleasure reading bill-of-fare.

The second main reason for regression is lack of confidence in one's ability to sweep through the author's sentences and to come out with a clear definition of his ideas. Are you the kind of person who glances back at the cashier's window after cashing a check, just to make sure you didn't leave one or two $10.00 bills? Do you bang the mail box cover several times, checking each time to be certain the letter dropped? After setting the clock for 6:30 A.M., do you, just before dozing off, reach over to test whether the alarm plug is out? Some of this compulsive regressive behavior, innocent enough in itself, may be carrying over into your reading habits.

It is flattering to the ego to know for sure what one is doing when one is doing it. Being absent-minded is no joke—it's time-consuming and confidence-destroying. In reading, matching the author thought for thought in the logical structuring of his ideas pays off in increased self-esteem as well as in better comprehension.

READING AND VOCALIZING

When we first learned to read, the best progress check the teacher had was to make us say the words aloud. This practice served its purpose well in the early grades. With some adult readers, however, the habit has persisted, and for them the saying of the words is synonymous with getting meaning from the words. A person who actually whispers the words to himself while reading privately is said to be a vocalizer.

Most people do not move their lips and vocalize while reading. Yet for many readers the old habit of reciting the words has not been completely eliminated. The practice of bringing some part of the voice-producing mechanism silently into play is called sub-vocalization.

Even for those who have ceased to use the musculature of the voice-producing mechanism either in vocalization or sub-vocalization, reading may be slowed down by the necessity for mentally hearing oneself say the words before the meaning can be grasped.

An out-and-out vocalizer is in a primitive stage of his possible development toward efficient reading. A vocalizer sees and reads one word at a time. His rate rarely exceeds 200 words a minute. His comprehension creeps along with his rate, jerky, unsure.

Sub-vocalizers and auditory readers may attain good rates with good comprehension, but the reading activity tends to remain something of a chore. The need to rely on incipient or attenuated movements in the throat, and the need to hear oneself say key words and phrases, slowly but surely induce physical fatigue.

CRITICAL READING

No one need remain in the childhood stage of his reading ability. Visual reading helps unleash thinking power. An extension of the brain, the eye is capable of communicating ideas directly to the mind without the drag of physical concomitants. The visual reader does not read words or phrases. He reads ideas. The amount of material which he takes in with one fixation is necessarily large. His rate of reading is necessarily fast. He does not have to regress. And because his attention is focused on the author's thought, his comprehension is necessarily good.

An article or report may appear to be perfectly straightforward and factual. Sooner or later, however, a writer will begin to suggest his personal viewpoint, his sense of values, his bias. Critical reading demands that we keep a vigilant eye on an author's value judgments. We must apply to those judgments the test of our own knowledge and experience.

Here is a three-step method that can aid critical reading. The more concious-ly it is applied, the more valuable it should prove. First, what is the problem that the author is concerned about? Many times the title itself is a clear indicator. When this is not the case, the first paragraph or so should reveal the nature of the problem at hand.

Second, does the writing stand the test of any pertinent questions which can be raised? To ask these questions the reader has to think about the problem presented by the writer.

And third, how valid are the author's conclusions? If the problem has been treated fairly, the reader should find that his questions have been answered.

In short, critical reading requires that the reader satisfy himself on three scores: (1) the nature of the problem, (2) the author's views on the problem,

and (3) the reader's reactions toward the author's solution to the problem. If a reader has read carefully, questioningly, skeptically, he is well qualified to judge the adequacy of the author's conclusions.

KELLY AND THE NEW FRONTIER

Poor reading habits can become the great obstacle in the path of one's personal growth and advancement. Take, for example, a supervisor whom I have known. Ray Kelly was a promising young foreman. His outstanding performance as a foreman led some of the top management people at his plant to believe that he would go far in the organization. It was not very long before he had his big chance. He was less than thirty years old when he was promoted to superintendent.

As a foreman Kelly had been efficient, resourceful, creative. He had a pleasant way with everyone, and people looked to him for leadership. He was conscientious about his work. This trait was shown, for instance, in his attitude toward any written material given to him. He would take reports or directives home to read because, he said, he couldn't waste valuable company time just sitting around reading.

In his new job as superintendent Kelly was suddenly confronted with a vast array of written material with which he was expected to become familiar. The sheer bulk of the stuff made it absurd to think of carting it all home to read. Being conscientious, Kelly felt that he had to read every word of every communiqué that came across his desk. He read so slowly that the process became a kind of endless torture.

He got to hate the mountain of material which beset him daily. In an effort to try and catch up, he closeted himself in his office for days at a time, seeing no one. He had no time for creative work of his own. Finally, in desperation, he shoved aside all of the written matter and tried to do his job without looking at any of it. He pulled several rather serious blunders because he was ignorant of facts which were lying unread in correspondence on his desk. He had been on the new job a few months when his superior talked with him and pointed out that he was failing as superintendent.

Kelly's boss wanted to help him. In discussing the problem it became apparent that Kelly's poor reading was basic to his difficulties. At first Kelly was embarrassed to admit to so elementary a deficiency—of course he could read! But at his superior's insistence he enrolled in a program of reading improvement.

With the stimulation of such a program, Kelly was able to more than double his reading rate in a few weeks. He learned to vary his reading speed, to read critically, to skim, to scan. As time went by he lost his dread of the daily pile of reports and memos. He scheduled a part of his day for what he now recognized as a vigorous and challenging phase of his job—reading.

Even without the unquestioned advantages of a good course in reading improvement, anyone with sufficient interest can do a great deal toward bettering his own reading ability by using one or more of the many fascinating books on the subject. Center's palatable book is aimed at helping people "to read with intelligent delight." Lewis' popular book "has been tested clinically." Witty's comprehensive text "tells you exactly how to become a better reader." Brown's workbook of mature readings and comprehension checks "is intended to help you develop that reading efficiency so important in college and long afterwards." And, to mention one manual devoted entirely to vocabulary building, Funk and Lewis' inexpensive Pocket Book "is planned to enlist your active cooperation." The complete titles of these books appear in the appended bibliography.

IN CONCLUSION

Men like Ray Kelly have discovered that today, in the important jobs, information and ideas are gained chiefly from the printed page. While the early manufacturers of the horseless carriage had only to talk with colleagues—and competitors—to keep up with the latest ideas in the budding automotive field, modern industrialists not only must acquire a vast fund of knowledge but also must read professional and trade journals to keep up with current developments. Without effective reading skills it is practically impossible for one to gather the ideas which are needed to solve problems that arise both on and off his job. The new frontier is that of technological change and of social relations, and the people who are free to achieve to the limit of their own natural abilities on this frontier are those who dare to sit and read. •

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S.A.M. MEMBERS — LIST YOUR PUBLICATIONS

Publications of the members of the Society for Advancement of Management on any phase of management are useful not only to our members themselves but to others working in or interested in the management field. Therefore, the National S.A.M. Office plans to prepare a listing of the publications of Society members brought out during 1954-55.

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As a member of S.A.M., please send in the information about such publications you have had during 1954-55, giving title, publisher, publisher's address, date published, number of pages, price, and a brief annotation of the contents, before the closing date of the listing, January 1, 1956, to

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OTHEL D. WESTFALL, now Professor of Accounting and Acting Dean of the College of Business Administration, University of Oklahoma, has had fifteen years of accounting and auditing in private business, in state and national government offices, and in the Navy. He received his B.S. in Business from the University of Oklahoma, his M.B.A. from Northwestern, his Ph. D. in Business Administration from the University of Texas, and is a C.P.A. He has many publications to his credit in the accounting and tax fields.

Figures and the Manager

By Othel D. Westfall
Professor of Accounting
University of Oklahoma
Norman, Oklahoma

Is the accounting function operating in your company to the limit of its capacity and utility? Here is a description and review of all of the many vital and useful activities accounting can perform in a company, both in historical terms, such as methods or system design, preparation and verification of statements and restatements, comparison and analysis of data, and in prospective terms, such as assistance in planning, coordination, and control.

THE American scene abounds with numerical data concerning almost every conceivable subject. Everyone is constantly confronted to a greater or lesser extent with figures which have some degree of relevance to his courses of action both on and off his job.

No attempt will be made in this paper to go beyond those numerical data which should be of material significance to business management in the operation of a business enterprise. These figures include both external and internal data. External data include but are not limited to figures collected, processed, and disseminated by the Federal government and by trade associations, which reflect general economic conditions and conditions in the various industries. A further example of external data would be data collected in a market survey for a particular enterprise. Internal data consists of figures relating to the particular enterprise which are collected or developed and processed by specialists in the service of the firm. These specialists may include one or more accountants, business economists, mathematicians, engineers, statisticians, or others. To some extent these specialists deal with different data. In varying degrees these specialists differ in purposes and in methods of accumulating and processing data. In this paper primary emphasis will be placed upon the functions of accounting in supplying useful data to management since the writer is not fully conversant with the services of other specialists.

Accounting deals with either historical or prospective data which directly or indirectly have affected or may affect financial position and financial results of operation. Thus accounting deals largely in internal data but in many cases deals with external data, either with or without prior processing by other specialists in the firm. Some individuals are qualified to process not only internal financial data but also external data which may require processing before integration with company data. For example, the qualified accountant may also be capable of relating general business conditions to prospective sales.

Perhaps the best way to indicate the utility of accounting to management is to describe the evolution of accounting, or the manner in which the horizon of the accountant has broadened over time. The evolution of accounting may be segmented into the following stages or areas, which will serve as the main topics of discussion in this paper:

1. Historical Accounting, and
2. Prospective Accounting

No implication is intended that the development of prospective accounting led to the abandonment of historical accounting. Prospective accounting is a superstructure in relation to historical accounting; the former could not exist without the latter. Historical accounting is in fact continuing to develop or change as the economy changes, though the newer prospective accounting is perhaps developing at a faster rate.

Historical accounting deals with financial data which represent events that have occurred and which, therefore, belong to the past. It is that area of accounting which chops the financial history of a concern into segments called fiscal periods, and which casts up periodic statements of financial income and financial position. It is basically the task of keeping track of the money and other assets that we own, the debts that we owe, the equity of the owners, and the factors which cause the owners' equity to change. We have grown to take the accomplishment of this task for

granted, and sometimes we lose sight of the fact that this elementary accounting function is a foundation stone for management. Without knowing where we stand and how we got there, future planning would have no starting point. Also, we should immediately be in trouble with tax and regulatory authorities. Further, the door to outside financing would be closed. This area of accounting embraces the following major functions, each of which will be discussed:

- Methods or system design
- Preparation of tax returns
- Preparation of statements
- Verification of statements
- Restatements
- Comparison
- Analysis

SYSTEM DESIGNING

Like any other operation accounting must be planned, whether well or poorly. Planning for the accounting operation is known as methods work or system design. Larger concerns have their own methods units whereas smaller concerns rely on independent accounting consultants. The accounting system should be custom built for each concern, because of inherent differences between firms. With the firm's organization chart in view, provision should be made for classifying financial data by areas of managerial responsibility. Provision must also be made for accumulating the multitude of information required by taxing and regulatory authorities, not to mention owners and creditors. An important consideration in system design is the incorporation of safeguards or controls against loss of firm assets through errors or fraud. In general, this is accomplished by dividing the work of data processing so that an error or defalcation by one person will automatically be detected by another person. Another major consideration in system design is the cost of accounting. This involves a comparison of cost with value of results, where there is freedom of choice, and choice between manual and mechanical processes.

The function of accounting with respect to taxation is so well known that it should require little comment here. Most concerns are equipped to handle their own payroll and miscellaneous tax problems. The larger concerns usually have staff units capable of dealing with income tax matters, whereas smaller concerns frequently rely on independent accountants for this service.

Periodic summaries or statements are perhaps the basic product of the historical accounting process. These summaries range in nature from statements limited to a specific area of managerial responsibility, to overall statements of income and financial position. Generally the limited statements are issued more frequently than the overall statements. These statements serve as records of accomplishment for segments of the firm and for the firm as a whole, as well as a reflection of the firm's financial position at a given date.

Because of the vital interest of owners, creditors, and regulatory bodies in the validity of a firm's financial statements it is a common practice for such statements to be verified before publication. This verification is done by independent accountants or auditors, who stake their professional reputations by expressing opinions on the verified statements.

NATIONAL MEETING DATES
1956

January 28, 1956....Executive Committee
April 28, 1956.....Board of Directors
June 22, 1956.....Executive Committee
June 23, 1956.....Board of Directors

In order to make statements more meaningful for various purposes it is a common practice to restate or re-express parts or all of them in terms other than dollar amounts. A common practice is to re-express an item as a percentage of some other item. For instance, all items on an income statement may be expressed as a percentage of net sales. Another common practice is to express the ratio between two items; as, for example, the ratio of current assets to current liabilities. A striking example of the utility of such re-expressions is the development by duPont and other companies of rate of return on investment, which is simply an expression of percentage relationship, as an instrument of operating control at the top management level.

A second type of restatement is that of pictorial representation, in the form of charts or graphs. This form of presentation has the advantages of eliminating much detail and of facilitating interpretation of the data. These advantages result in both a saving of time to the user of the report and an increase in the utility of the report.

Other types of restatements or re-expressions may be of a more fundamental nature. The processing of historical financial data by accountants is based on certain assumptions and generally accepted accounting principles or conventions. One of the assumptions is that the dollar is a stable measure of value. And one of the generally accepted principles is that a relatively permanent investment in depreciable assets should continue to be stated at original cost less depreciation based on such cost. There is considerable sentiment for the abandonment of the assumption and principle which support original cost depreciation, and considerable experimentation with restatements of original cost data under varying concepts of realism or validity. But as yet there is no general agreement either that such restatements should be made or, if made, as to how they should be made.

The maximum value cannot be realized from either a statement or restatement unless we have something to compare it with. We need a yardstick against which to set this statement of performance or condition, in order to determine whether the thing stated is good, bad, or indifferent. And so, it is a common practice to compare every statement or restatement with something. In the historical area of accounting it is usual to compare this period or date with the last period or date, to compare this operating department or segment of the business with another department or segment, or to compare this business with a competitor or with an industry average. In general, a comparison is made either for the purpose of determining the direction of change over time or for the purpose of determining differences.

STATISTICS REQUIRED

Accountants generally have appeared somewhat unsophisticated with reference to direction of change over time. Usually they refer to direction of change in actual data as a trend. A better acquaintance with statistical methods would enable them to isolate the influences of seasonal, cyclical, secular, and irregular growth or decline factors. Although statistical methods of time series analysis may not be used blindly, because the forces measured are dynamic and changing, they serve in part to emphasize that both short term and long

term factors are present and that these factors may or may not be operating in the same direction.

Comparisons aimed at determining differences logically raise the question of why the differences occurred. Here accountants have made more progress and are on sounder ground. For example, procedures are well developed for explaining the difference between gross profit this year and last year in terms of variations in selling price, cost, volume, and sales mixture. Of course these basic reasons are not independent of each other and each may be further explained by various contributing causes. Again, accountants usually can explain without difficulty the differences between balance sheets as of the beginning and close of the year. Thus armed with knowledge of why any unfavorable developments occurred, management should be in better position to take remedial action.

ACCOUNTING ANALYSIS

The explanation of differences derived from comparisons is only one phase of the general process of *analysis* which is widely used by accountants in many other situations. Analysis means simply the breaking of the whole of anything into its component parts. Thus sales may be analyzed by product, by channel of distribution, by territory, by salesman, or by customer. Distribution costs may be analyzed by function and thereafter along the same lines as sales. Production costs may be analyzed by elements, by products, by units, etc. All costs may be analyzed by variability, by degree of relationship to the object of expenditure, etc. Accounts receivable may be analyzed by age, for example. In fact any sum which is divisible into distinguishable components may be analyzed. Analytical work frequently reveals information of material significance to management in the operation of the enterprise.

Historical accounting is indispensable for the several reasons which have been indicated. Also, this survey may have given the impression that historical accounting alone can be a stupendous task. It can. And it is complex enough to challenge the capabilities of much better than average intellects. In fact, many well qualified accountants have been so engrossed with the task at hand that they have failed to realize the extra service potential which is inherent in the accounting process.

CIPM Reports . . .

Executives in Marseille Confer On Training Problems

IN 1952, the Council, under government auspices, recruited and briefed a team of four American executives who held a series of seminars in major industrial centers of France. These seminars covered the subjects of market development, organization and management, production management, and human relations. The last named seminar was led by Charles J. Jensen, President of the Vikon Tile Company in Washington, New Jersey. Like many other CIPM seminarists, Mr. Jensen gets frequent letters and reports from French executives who took part in his seminars. One of these comes from the co-chairman of his seminar in Marseille, describing conferences on management training inaugurated in 1952 as a result of Mr. Jensen's seminars on human relations, which have been functioning continuously for the past three years.

In 1954, the Marseille training study group had an attendance of nearly 400 people, of whom 20 percent were owners of industry. There were six individual sessions covering various phases of company training programs. During each session, small groups met to thrash out all aspects of the subject at hand in a panel discussion. Some of the subjects covered in the conferences included methods of introducing the idea and the desire for training to management. "Sometimes French presidents who wish to introduce training programs fear that they will meet opposition from management and other employees of the firm." Did the conferees think this statement true, and if so, how should the problem be met?

The Marseille executives also studied various techniques for instituting training programs, bringing to the discussion cases taken from their own experience or from the experiences of French firms with which they were familiar. And in the final session, the conferees turned their attention to the question of the need for training programs, and the extent to which they should be used in specific instances. Thus all participants were able to return to their own companies better equipped to evaluate their own training requirements and inaugurate the kind of training program to meet them.

JANE DUSTAN, *CIPM Editor*

The Council For International Progress in Management, formerly the National Management Council, is a non-profit, non-political organization devoted to the promotion of the practice of scientific management on the international level. It represents the organized management societies of twenty-four nations of the Free World with its office at Geneva, Switzerland. SAM is a charter member of CIPM.

It seems to be generally agreed that the primary functions of management are as follows:

1. Planning the most profitable, or at least the most desirable, course of action. This involves decision between alternatives;
2. Coordination, or alignment of efforts of the organization toward the objective; and,
3. Control, or keeping the organization currently on course.

With respect to the first of these functions it might be argued that the past is the best guide to the future. If so, it would follow that a record of the past would be the best contribution accounting could make to the planning function. It is probably true that the past is the best single guide to the future, at least in the sense that the future may be more like the past than unlike the past. But history does not repeat itself in all particulars, and the difference may be great enough to convert success into failure.

The future may be different because of either internal or external influences. Internal influences refer to those changes which stem from management decision, such as plant expansion or the addition of a new sales territory. External influences refer to those changes in the external environment which impinge upon the firm. These external changes make themselves felt in the form of changes in such factors as sales volume, selling prices, material prices, or wage rates. External influences may, and probably will, change things even though manage-

ment itself would be happy to preserve the status quo. Thus it becomes essential that we attempt to foresee external change, and that we trim our sails accordingly. It is even more essential to peer into the future when considering the investment of additional capital in plant expansion or otherwise. The business economist is the specialist who should be best qualified to predict external change, although some concerns rely upon a consensus of executive opinion or other means of forecasting.

Of course, the mere probability of a specific change in sales volume, or a specific change at some other point of contact with the external environment, does not tell us what effect the prospective change will have upon the profit of the enterprise. This is the point at which prospective accounting comes into being. From historical work the accountant is already skilled in the measurement of net income and, with his knowledge of costs and other internal relationships, he is the person who should be best qualified to predict the measurable effects of a prospective change in revenue or cost upon enterprise profit. The process of projection should be more simple and reliable where realistic operation standards are in existence.

EFFECTS ON NET INCOME

We do not say that it is possible to measure all of the effects of prospective change upon net income, just as it is impossible to measure quantitatively some intangibles associated with past events. We do not say that effects upon net income should be the sole consideration in initiating or adapting to change. But we do say that effects upon net income are a most important, if not controlling, consideration. And we say further that in a given situation the accountant should be as well qualified as anyone else to perceive and point out other factors which should be considered in arriving at a decision.

The planning function of management may be concerned with the following general categories of future events:

- More or less isolated projects or events
- Total operations (budgeting)

Isolated or individual projects or events will consist of such matters as expansion of productive facilities, the addition of a new product, addition of a new sales territory, changes in production methods, changes in distribution methods or channels, replacement of obsolescent facilities, product simplification, or elimination of a sales territory. Usually these matters are of long term significance; that is, their effects will be felt over several fiscal periods. For purposes of estimating effects upon net income these projects may be classified as follows:

- Expansion projects
- Replacements and changes in methods
- Retrenchment projects

The evaluation of expansion projects may require the combined services of the engineer, the business economist or the market research specialist, and the accountant. If it is a production project, the engineer can estimate capital outlay, operating manpower and material requirements, power consumption, etc. Annual revenue from the project can be predicted by the business economist either separately or as the firm total less what should be derived with existing capacity.

For long term estimate purposes revenue is usually estimated along a trend projection, which should average out the effects of cyclical flutuations. If it is a distribution project the additional annual revenue probably will be predicted by a market research specialist. In either case the accountant will prepare annual operating cost estimates, before allowances for depreciation, and will estimate net annual income before depreciation for the project. In some cases the estimated net income may be so large as to make further calculations unnecessary. In other cases it may be desirable to calculate an estimated rate of return, to compare either with estimated rates of return from other proposed projects or with the cost of borrowing or otherwise obtaining needed capital. The most realistic method for computing estimated rate of return is a compound interest or annuity method which automatically allows for recovery of investment or depreciation.

Proposals for the replacement of obsolescent facilities or for changes in production or distribution methods, assuming no material change in total revenue is involved, are evaluated by way of comparing cost-if-you-don't-change with cost-if-you-do-change. An essential consideration is the interest cost on the excess of any new capital required over the salvage value of any facilities to be disposed of.

ESTIMATING COMPLEX FACTORS

Retrenchment projects include such matters as the elimination of a product or the elimination of a sales department or territory. Here there is a greater complexity of factors to be considered, and some of these factors are not quantitatively measurable. The mere fact that the product or department shows a net loss should not be determinant. The product or department may be bringing in more revenue than it is *currently* costing; that is, revenue may be exceeding out-of-pocket cost. This the accountant can readily determine and report upon. If that is the case the product or department should not be eliminated unless fixed charges being allocated to the product or department can be diverted to a different activity. Of course, there is always the possibility that the situation of the product or department might improve materially over the present, or that its existence complements or otherwise sustains more profitable aspects of the business.

The planning of total operations for a future period or periods, usually for a fiscal year and its segments, ordinarily will encounter one or more prospective changes in external conditions and may present the possibility of alternative courses of action by management. Assuming that prospective changes and alternative courses have been specified, the following methods are available for

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Northern N.J.	1622	Cincinnati	
Richmond	1586	Dayton	
New Orleans	1524	Detroit	
Nashville	1520	Fox Valley	
Kansas City	1478	Georgia	
Washington	1476	Hartford	
Binghamton	1474	Madison	
Trenton-Del. Valley	1454	Puerto Rico	
Clearing	1400	Stamford	

estimating net income under one or more of the alternative courses:

- Breakeven analysis or simple regression
- Linear programming or multiple regression
- Complete or detailed estimates of all phases of operations

Breakeven analysis is a tool which is familiar to most of the data specialists, at least to the accountant and the business economist. Although breakeven analysis may have other uses, such as to a limited extent in connection with control of operations, it is a short method for estimating net income in a given situation. It is based primarily on the assumption that total operating costs are divisible into two categories: those which are fixed in amount over time, and those which are variable with some factor such as physical or dollar volume of sales. Breakeven analysis is familiarly represented by a chart on which the amounts of fixed cost, variable cost, total cost, and sales are plotted in relation to volume. The breakeven point is the point at which the sales curve intersects the total cost curve. The amount of profit or loss for a given amount of sales can readily be determined from the chart. The procedure is useful for approximating net income under a proposed course of action. However, the basic assumption that operating costs can be segregated between those perfectly variable and those absolutely fixed is a weakness. Many costs are neither perfectly variable nor absolutely fixed. A logical case can be made that there is no such thing as a fixed cost. Breakeven analysis is also open to the objection that it cannot simultaneously evaluate differing alternatives. A separate computation or chart would be needed for each alternative, although each calculation or chart ordinarily should not require much effort.

Much publicity has been given recently to *Operations Research*, which is described as an effort to advance the use of scientific methods in the area of management. This description carries the implication that methods previously in use are not scientific. Those who are versed in the more familiar techniques are willing to bear this trampling on their toes, of course, if the new techniques are proved to have material advantages. One of the techniques of Operations Research is described as *Linear Programming*, which is said to be a technique that will select the best of available alternatives by one continuous operation. The writer is not familiar enough with this technique to pass judgment. But the technique would seem to be open to the same objection as breakeven analysis, which is essentially a process of simple regression, with the added possibility of compounding any error. In any event the technique does

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not eliminate the need for a completely detailed set of estimates, including estimated cash receipts and disbursements and estimated balance sheet, as discussed below.

BUDGET ESTIMATES

Detailed estimates, which collectively constitute the budget, are within the province of the accountant. They are used to test alternative courses where breakeven analysis or linear programming is not used, or where neither of them has produced a conclusive selection. For selection purposes detailed estimates ordinarily will not proceed beyond estimated income statements. When selection is made, however, the detailed estimates will be continued through estimated cash receipts and disbursements and will conclude with the estimated balance sheet at the end of the budget period. The estimated income statement, with its body of supporting schedules, will be needed for coordination and control of operations. Estimated cash receipts and disbursements are needed to determine whether or not the plan will generate sufficient cash to sustain operations and, if not, the amounts and timing of outside financing operations. The estimated balance sheet is prepared to determine the financial position in which the plan should place the firm at the end of the planned period. Sometimes the preparation of estimates of cash receipts and disbursements and financial position may disclose prospective developments justifying revision of the selected plan.

Among the several valuable by-products possible in budgeting are stabilization of employment and inventory control. Even though sales may fluctuate seasonally, it is possible to level out production to the extent consistent with reasonable inventory control. The leveling of production tends to stabilize the labor force, which is conducive to efficiency and may result in reduction of payroll taxes. Inventories can be held to a minimum consistent with economy in purchasing, economical production runs, stabilization of employment, and margins of safety against interruption of production and sales.

With regard to the coordination function of management, the integrated plan of operations will be segmented by areas of managerial responsibility and each member of the management team will be furnished with a statement of his part in the plan. Thus the efforts of all will be coordinated toward accomplishment of the objective.

The responsibility of management does not cease with the adoption of a plan of operations and with alignment of effort toward fulfillment of the plan. It is necessary to keep a continual check on actual performance and to take corrective action where necessary. This is the control function of management. Accounting is prepared to assist in the discharge of this function by the following means:

- Timely quantitative comparisons of actual performance with planned performance, and determination of reasons for variances. This procedure may be best suited to middle and lower levels of management.
- Comparison of actual and planned rates of return on investment, for the concern as a whole and for such operating divisions as may be desired. This procedure may be best suited to top management.
- Internal auditing.

The above control measures should not require extended comment. Obviously management should be informed of material quantitative differences between actual and planned performance as currently as practicable, at least monthly. Differences can readily be analyzed by basic cause; that is, by the effects of variation in selling price, volume, and cost.

RATES OF RETURN

In this connection, the existence of predetermined operation standards will make possible a further analysis of the cost variance. This type of reporting may best suit the needs of members of the management team nearest the "firing line." Top management, however, may desire a more sophisticated and less detailed comparison of actual and planned performance. Such a comparison can be furnished in the form of actual and budgeted rates of return on investment. Reference has been made previously in this paper to the development of this technique by duPont and other organizations. This form of comparison is well suited to pictorial representation.

Although internal auditing ordinarily is not directly concerned with budgeting, no discussion of the control function of management would be complete without mention of this phase of accounting. Internal auditing has only recently emerged as a control arm of management, and its development in that direction is continuing. While internal auditing is still in large part concerned with verification of historical data, including detection of fraud and errors, it is being used increasingly to evaluate efficiency of performance and compliance with policies laid down by top management.

CONCLUSIONS

The accounting process is the major source of figures used by management in the operation of a business. To the more or less passive role of processing data relating to events which have already transpired, accounting has added the more aggressive role of contributing toward determination of the shape of things to come. Accounting is uniquely adaptable to the task of integrating the many facets of a proposed operating plan into a complete picture of prospective income, cash flow, and financial position.

Historical accounting is essential to management in the following major respects:

1. Through performance of the fundamental task of keeping track of assets, liabilities, capital, and income or loss, and overall measure of management's stewardship over the capital entrusted to it.
2. By providing a degree of protection against loss of assets through errors or fraud.
3. By providing the information required by tax and regulatory authorities.
4. By providing information without which the firm would be denied access to outside sources of financing.

Prospective accounting is or can be useful to management in the following major respects:

1. Determination of the most profitable course of action, whether with respect to a specific venture or with respect to total operations. In this function, people versed in specialties other than accounting are also needed.
2. Coordination of operations, through the segmentation and expression of the overall plan by areas of responsibility.
3. Control of operations through current comparison of actual and planned performance. A by-product of this function is the measurement of operating efficiency, where realistic operation standards are in existence. •

JOSEPH H. FOEGEN was born and reared in Wisconsin. After a year overseas in the Army Signal Corps from 1946-47, he worked for the Thilmany Pulp and Paper Company from 1947-50, and has since studied and worked at the University of Wisconsin, from which he obtained his Bachelor of Business Administration degree in 1954 and his M.B.A. in 1955, majoring in labor-management relations. He was president of the S.A.M. Student Chapter and of the Newman Club at the University of Wisconsin, and is currently working toward his doctorate there.

Should You Tell Them Everything?

By Joseph H. Foegen
University of Wisconsin
Madison, Wisconsin

If business exists to make money, and it is doing so, why bother about more communication? Is the average employee so disinterested that most communication is a wasted effort? The author counters these and other arguments advanced against giving too much information to employees, presents some of the reasons why he thinks free communication is desirable, and concludes, "Too much communication is impossible."

DO YOU think your employees are entitled to know everything they want to know about the company? Everything? Well, it depends a great deal upon what you think communication really is.

Elton Mayo says that communication is any transfer of meaning, even implied transfer through silence, between or among individuals or groups. This is a pretty broad and inclusive definition. If it is accepted, it follows that it is impossible to communicate too much, to give employees too much information. What you do not say to employees might *communicate* even more than what you say.

Even with this definition, however, there are many angles to consider. For instance, there is quantity versus quality, such as bombarding employees with a constant flow of free enterprise literature, as compared with really telling them what they want to know. Also, information can be either shared or conveyed. Alexander Heron makes this distinction, showing that social ideas and relations are involved in sharing information, whereas simply conveying information is purely mechanical. This article will try to demonstrate that sharing of all the information the employees want to know most is desirable, a simple and straightforward cooperation, based on trust and confidence. In this situation, though admittedly ideal, it would be impossible to have too much communication.

Fortunately, the ideal in this case can be approached. If it could not be, it would be a waste of time to even talk about it. Showing that it *is* possible, a number of companies, Pitney-Bowes, Apex Electrical, Scott Paper and others are well along the road to a completely free exchange of all types of information with their employees, so much so that even the details of the financial statement itself are no longer classified information.

Scott Paper Company, for example, presents it operating story each year through small group meetings, delivered personally by its general manager of paper mills. The report is comprehensive, though simple and informal, covering reinvestment of earnings, stockholders' dividends, wages, productivity, etc., and supplemented by exhibits and other visual devices. The company pays regular rates for attendance, and time and one-half if employees attend before or after their regular shift. Employees are urged, but not required, to come. 95% attendance is common.[1]

As another concrete example of what companies are doing, the Fischer and Porter Company of Hatboro, Pennsylvania can be cited. F & P publishes a *complete* financial report to employees, not annually, but *every month* in the employee publication. A summary profit and loss statement for the previous month is included, as is a balance sheet showing the financial position as of the end of the month. Orders received, shipments made, and backlog are listed, together with a computation showing how many weeks' work this represents. Book value of Fischer and Porter stock is shown, along with an appropriate note that the stock is not registered with the Securities and Exchange Commission and just what that means. One reason for the financial report's being so extensive is this statement of policy, taken from the employee handbook: "No F & P employee is ever laid off due to lack of work as long as the business can continue to be operated as a profit or at least operated at a breakeven point."[2]

[1] "How're We Doing? An Informal Report to Employees", *Management Review*, Volume 39, Number 12, December, 1950, Page 714.

Employees in most cases want to know everything about their company and its current position. Specifically, a Dartnell Corporation survey showed that among the twenty questions most commonly asked by employees are questions about sources of revenue and expenditure, profits, financial status of the business, and what the company is doing to protect and to stabilize jobs and employment.[3] No field of information, if it will help promote the employees' understanding of the business and their place in it, should be excluded.

There used to be a lot of discussion over whether or not an employee should be told what he wants to know about the company. While this view is still often expressed, an increasing number of companies are finding it to their advantage to take workers into their confidence. There are at least three good reasons: any advance in broad, social self-understanding depends on it; it is good business from organizational and public relations standpoints; and the personal factor, the increased feeling of importance and belonging that a person feels when he knows what is going on, is very important for group morale.

ARGUMENTS FOR SECRECY

Some of the arguments that are still advanced against giving information to employees will be considered next. Then, after countering each as it arises, a few of the reasons why free communication is so desirable will be presented, examples will be given, and conclusions drawn.

One old argument is that it would be a waste of time to give out information because it is impossible for anyone in the working class to better himself. Less valid than some of the other arguments, this one has quite obviously been refuted in this country. While the Horatio Alger tradition has been somewhat diluted perhaps, it still is possible to find people of modest original background making striking successes of themselves.

Another outdated argument is that the mass production process requires largely identical individuals to fill routine, identical jobs; therefore, if some people knew or learned more than others, they would become dissatisfied. People in the personnel field cannot accept this point of view. Entirely aside from obvious individual differences, new techniques and the upgrading of skills to come from automation make it imperative that more, rather than less, communication take place among members of the organization. Induced variation through proper communications is one way also of getting an otherwise routine worker to prepare to take on more responsibility.

BUSINESS SHOULD EDUCATE

Some people say that business exists to make money, and if it is doing so, why bother about communication, which may cost more money. This attitude, while strong in the past, is also losing ground. The chairman of the board of Johnson and Johnson has said that modern industry must not only be a business, but also an educational institution if it is to survive. In past years, business didn't bother with the health and welfare of its employees any more than it now does with their education. However, with the coming of the various fringe benefits, both legislated and bargained, interest among management has of necessity increased. Business has become a social and educational as well as an economic institution, and too much communication is impossible as the institution assumes new duties and becomes more complex.

One of the main reasons given for limitation of communications is fear of competitors getting information they should not have. If all information, including financial data, were to be released to all employees for the asking, it is said, the information could very well end up in the hands of competing firms. This of course, is always a possibility. Secrets of the business sometimes leak out, even through official channels, much less through the average employee.

Sometimes it might seem that it would be better for both the company and the employees, in the interests of competitive position, if certain information were to be kept confidential. However, confidential information not only creates suspicion and restricted production on the part of the employees, but is usually known anyway, through the grapevine or through the union. Some people think that even if information of the kind ordinarily thought of as confidential did get out, it would be of little competitive value. Because of the many reports that industry must make to various government agencies, all of the important information is a matter of public record anyway, so there is little point in risking a suspicious work force by keeping secret certain facts and figures. In 1942, one author said, "The usually guarded facts involving costs, profits, taxes, and similar matters are clearly not worth guarding today".[4] While it is true that the urgencies of war are not with us today, many of the controls and regulations in this area are, so the statement would seem to apply just as much.

By being frank and open with the work force, it might even be possible to be protected by sharing information of a competitive nature with employees. An excess amount of secrecy has a tendency to stir interest in things that otherwise might not even cause any comment.

A very strong argument against telling workers about what is going on is that it is largely a case of wasted effort. The average employee just isn't interested enough to make it worth-while. Cases are cited showing that even after what seemed to be extensive efforts had been made to give out some specific facts, employees did not seem interested in them. It must be admitted that some people just won't "give a darn", no matter how hard management tries to interest them. However, the answer to the interest argument nevertheless lies in the way the material is presented.

EFFECTS ON EMPLOYEES

The worker is characterized by a short-range, security-centered motivation. Management, on the other hand, is driven by competition, long-range views, and a much closer identification with the company. Therefore, it follows that if the employee's interest is to be assured, the appeal has to be slanted toward him individually; it must show how his present situation will be affected.

Closely allied to this security problem is the charge that if the communication situation in a company is so good that the employees know months in advance major changes in operations planned by the company, their worries and anxiety over what will happen to them and to their jobs will cause serious disruption in production.

If, for example, the foreman were to gather his men together some morning for their usual, pre-shift "hash session", and if he were to tell them "out of a

[2] "How to Give 'Em All the Facts", *Factory Management and Maintenance*, Volume III, Number 8, August, 1953, Page 108.

[3] Aspley, J. C., and Whitmore, E., Editors, *The Handbook of Industrial Relations*, 3rd Revised Edition, Chicago, Dartnell Corporation, 1949, Pages 863-864.

[4] Heron, Alexander R., *Sharing Information With Employees*, Stanford University Press, Stanford University, California, 1942, Page 5.

clear sky" that the company was moving to another city in the relatively near future, that would understandably be quite a blow. (This is, of course, an extreme example, but meant to illustrate the point.) Especially if that is all the information the foreman had of the plans, or if that were all he were free to give out, it would be understandable if production were to suffer. Psychologically, these people would have already lost their jobs. Not only that, but the company would have sprung a tragic surprise on them, one over which they could feel rightfully incensed. The primitive philosophy of "an eye for an eye", if nothing else, would almost certainly cause productive efficiency to fall off.

The answer to this charge lies in understanding the security motive in people, and in the way communications are handled. Most people like to know what is in store for them especially when it concerns something as vital as their jobs. They like to know it will be there for them when they come to work the following day. Not only is this knowledge in itself important, but also knowledge far enough in advance so that if movement, for example, is necessary, plans can be made. A sincere and expressed intent on the company's part to help in any way possible also helps.

It all "boils down" to that great intangible, how the employees feel about the company. If the company is trusted, as evidenced by its past actions, free communication cannot help but foster that atmosphere, and little disruption will result. If the company is out to beat the employee, talk about communication is wasted effort anyway; the company will have to take the consequences of its actions.

FEAR OF MISINTERPRETATION

The next major argument is that of understanding. Because of lack of education, it is said, why try to inform the worker and run the risk of misinterpretation, entirely aside from the consideration of added cost. The answer is simply that the gains in morale and productivity are well worth it. The average worker is actually more intelligent than management sometimes likes to admit. The native ability to learn is in most cases there. If the learner-worker has failed to learn enough to understand what management is trying to tell him, then management has failed in its responsibility as a teacher. If companies would really take as positive and aggressive an approach to this problem as they do toward technical problems, the understanding by the work force of company facts and policies would be limited only by their own aggressiveness. The only word of caution needed here is that, in assuming its task of education, management must make an extra effort not to "talk down" to its employees, something which is so easy to do, but which can kill understanding before it even begins to develop. The key then, to the "understanding" argument, is in proper education of its employees by management.

INCREASED UNION DEMANDS

Where a union exists in a company, it is often blamed for any lack of information on the part of individual employees. Even today, unions are viewed as arch-enemies—or at least something whose existence they are forced to tolerate—by some managements. As such, management fears that telling its employees too much about finances, for example, will make union demands at the next bargaining session that much stronger. Some people claim that the union doesn't want workers to rely too much on the company as a source of information for fear of losing some of its own political power. Others even go so far as to accuse the union of deliberate interference and distortion of information to foster labor-management antagonism.

Some of these claims undoubtedly hold true for some unions. The whole thing depends on the practices of the company and on the nature of the union. A reasonable union, if practices are equitable, will not be any worse if provided with more information. In fact, if communication lines were free, the number of labor disputes could be lessened. It has been estimated that one out of five labor disputes is due to the failure of employers to give employees basic facts against which they can check the statements of union organizers.[5]

Not only should the employees and the union have company information pertinent to collective bargaining, but management should recognize in the union a positive element management can use to make its general communication system more effective. Since workers in general are not readers, their main source of information about their company and about business generally is the talk of their union leaders. Therefore, if management and the union can talk together freely and easily, management will stand a much better chance of getting the word to the employee on the line.

Closely tied in with the problem of unions is that of management prerogative. Those "dirty" words as applied in this instance mean that since management is running the business, it alone has a right to this information, whether it be about profits, expansion plans, or other subjects. It just isn't any of the employees' business.

Fortunately, this attitude too is gradually disappearing. Companies are increasingly realizing the existence of a moral right of the employee to all pertinent information about the company in which the security of his job represents a very positive stake in his life. This moral right is thought to equal management prerogative.

One author advances some psychological arguments against giving information. This argument runs that a little knowledge is a confusing thing, and total information about everything is as impossible in business as it is in any other field, thus leading to frustration. Too much information would make the individual self-conscious about following a systematic procedure, and so, by thinking too much about it, his skill might become disorganized. Also, distortion of any information is common, and the more information, the more distortion there will be.[6]

OVER-COMMUNICATION CONFUSING?

It seems that the author of these views is "making a mountain out of a molehill." In fact, he appears to be a victim of one of his own ideas, disorganization of a skill due to concentrating too much on ideas. At any rate, we have to go a long way before everyone in industry knows what he is doing, in the broad sense, much less worry about the problem of overcommunicating. Overcommunication is impossible in any practical sense anyway. It might be a minor problem on the executive level, but even the above writer admits that is practically nonexistent among the hourly workers, who rarely get enough facts from their

[5] Aspley, J. C. and Whitmore, E., Editors, *The Handbook of Industrial Relations*, 3rd Revised Edition, Chicago, Dartnell Corporation, 1949, Page 862.

[6] Stryker, Perrin, "A Slight Case of Overcommunication", *Fortune*, Volume 49, Number 3, March, 1954, Page 117.

supervisors. And we are dealing here principally with this "lower" level.

To summarize for a moment, the arguments against a free interchange of information run all the way from fear of unions and a claimed lack of interest or understanding on the part of the employee to fear of what competitors might do with the information, and a feeling that the employees have no right to know what is going on. All of these arguments fall apart, however, if management simply assumes its responsibilities for education, if it considers the workers and their union as equal partners in turning out the product, and if it shows evidence of this attitude over and over again in its dealings with employees so that an easy-going air of confidence will be encouraged.

Before concluding, a few reasons why free communication is desirable should be given to balance the scales and to end on a positive note. Some of these have already been touched upon in the foregoing considerations.

One of the first reasons often given, which is concerned primarily with the individual employee, is that making information available heightens the satisfaction derived from the job. It gives the worker a greater feeling of personal importance, and a feeling that his job, however commonplace it may be, is nevertheless needed, and that he is performing a useful function. His sense of *proprietorship*, in other words, is increased. Broadening the field of interest, facilitated whenever information flows easily, increases job satisfaction.

SENSE OF UNITY PRODUCED

Another reason why information should be given freely is that it helps foster an identity of interest between the labor and management groups within any given company. This is similar to the job satisfaction argument just given. Assuming that the development of this identity of interest is desirable—which is not the case for some people who feel "antagonistic cooperation" between labor and management to be the ideal situation—free communication can build up the sense of unity and the sense of belonging that are desirable to most employees. If workers know the facts concerning a certain problem, they can, if allowed to, share in solving it and thereby sublimate their personal interests in favor of those of the group.

That free communication increases an employee's feeling of security, especially if his faith in the fair dealing of his company has been earned, has been talked about rather extensively above. Certainly, a worker kept "in the dark" about every company move will be of less than maximum value to either himself or to the company.

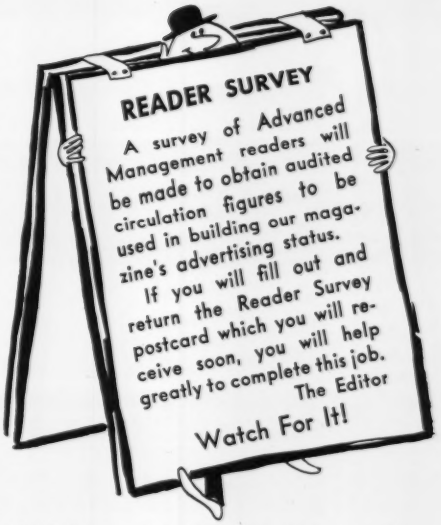
Incidentally, the importance of informing the *individual* must not be overlooked. Too often, the tendency is to inform *groups* of employees and to forget about the individual. Especially in a field that is conscious of the union as representing one group of workers and of management as representing another group, it is easy to lose sight of the importance of giving information to the individual. It is erroneously assumed that because the union is informed, the worker is also automatically given the information. Unfortunately, this is not always the case.

LEADERSHIP

To some people, free communication, the right of the worker to facts about the company's operations, is just that, a *right*. As a right it is a matter of philosophy. A worker investing his life in the business is no less entitled to this information than is a stockholder investing his money. The fact of his receiving wages for his work does not destroy the basic existing right, from this point of view. Admittedly, this is perhaps a more radical reason than some of the others. It could even be tinged with a leftist connotation. A lot depends, in evaluating this argument, on who is doing the arguing and what approach is being used. Both of these evaluations are outside the scope of this paper.

There are any number of other reasons, of course, why communications should be free. White-collar unions might be discouraged, more favorable union attitudes in general could be fostered, employees or unions can now find out many of the things formerly held secret from government agencies, production might be increased due to the psychological effects of more favorable worker attitudes, and public opinion generally is not in favor of secrecy. All of these arguments support the belief that nothing should really be deliberately kept from the employee.

Having considered then, some major pros and cons of giving unlimited information to employees, let us look at just a few concrete examples, of companies which go all out in letting their employees know "what the score is", and


READER SURVEY
A survey of Advanced Management readers will be made to obtain audited circulation figures to be used in building our magazine's advertising status.
If you will fill out and return the Reader Survey postcard which you will receive soon, you will help greatly to complete this job.
The Editor
Watch For It!

which have a high degree of cooperation among all in the company.

A spokesman for Esso Standard Oil Company, a progressive leader in this regard, said, "We want our people to know everything about the company that they can absorb."[7] Bendix Aviation has a comprehensive program designed to keep the foremen informed, and through them, the workers. Their policy is to give the foremen information on the economic position of the company, on devices and products, on progress of labor negotiations and the settlement of employee grievances. They also provide foremen with "a constant flow of information on such factors as ratio of nonproductive to productive workers, forecasts, estimated and actual figures on all expense items, scrap and rework."[8] Union and management work through a committee to jointly evaluate shop jobs at the York Corporation of York, Pennsylvania. A start has been made on the extension of the procedure to cover salaried jobs as well.[9] Carrier Corporation, as a part of its program of two-way communication goes so far as to have foremen selected to go to different parts of the country and work with dealers, salesmen and service people, thus getting information first-hand, and gaining insight into company operations.[10]

[7] Baker, Helen, "Transmitting Information Through Management and Union Channels", *Research Report Series No.* 79, Industrial Relations Section, Princeton University, 1949, Page 73.

[8] Heidt, M. A., "Stimulating Cooperation Among Management, Foreman, and Worker", *Personnel Series No.* 116, New York, American Management Association, 1948, Page 22.

[9] Wilson, Donald C. and Sichelsteil, Gerald T., "Joint Union-Management Job Evaluation", *Personnel Journal*, Volume 27, Number 11, April, 1949, Pages 420-425.

[10] Wampler, Cloud, "Two Way Street", *Personnel Series No.* 134, New York, American Management Association, 1950, Page 37.

Perhaps one the most advanced companies in recognizing the importance of sharing all information with employees is Apex Electrical of Cleveland, Ohio. At this company, management has advanced wages to employees throughout a steel strike, sales meetings are addressed by union officials, and union men perform the time study operations. The company management feels that it is a good idea to have union men make the time studies, claiming it to be psychologically beneficial to place responsibility on the operating people whose fairness and pride of accomplishment are thus challnged. Another factor to be considered, claims the company, is that the operating people must eventually accept the schedules anyway before they become entirely workable. Summing up the attitude of the company, C. G. Frantz, the president, has said, "We do not have any such thing as confidential information. We take the attitude that the employees are a part of its business and that they have as much right to so-called confidential information, because it is pertinent to the business, as any of the officers."[11]

These policies have worked in this company, not leading to the disastrous consequences contemplated by those who believe in limiting communication.

CONFIDENCE CREATED

Sharing of all information then, rather than adversely affecting the company, operates instead to make for better conditions on all levels. Wherever such an ideal situation exists, wherever information is shared so freely, trust and confidence will of necessity be found. In the now-famous article in *Fortune*, "Is Anybody Listening", the author stated: "Only with trust can there be any real communication, and until that trust is achieved, the techniques and gadgetry of communications are so much wasted effort. Study after study has pointed to the same moral: before employees will accept management 'facts', they must first have over-all confidence in the motives and sincerity of management."[12]

If such confidence exists, it in itself becomes a kind of silent communication, better than all the words and reports in the world. Too much of this sort of thing is impossible. •

[11] Shurtleff, Wade E., "Union Cooperation at Apex Electrical", *Personnel Journal*, Volume 28, Number 10, March, 1950, Page 361.

[12] "Is Anybody Listening", *Fortune*, September, 1950, Page 82.

A Pioneer of Scientific Management

Morris Llewellyn Cooke*

Excerpts from a review by Hyacinthe Dubreuil of "The Life and Times of a Happy Liberal" by Kenneth E. Trombley (Harper & Bros., 1954, $4.00), as printed in the May, 1955 issue of CNOF, a monthly published by the French National Committee on Scientific Management, and translated by Eleanor Bushnell Cooke.

. . . Just as France has had her eminent engineers to explain and develop the scientific method as applied to labor, America has had men, among whom one may identify Morris Llewellyn Cooke, considerably extending the path opened up by Taylor. It is Morris Cooke who was the first to point out that, contrary to tenaciously held prejudices, the Taylor methods not only had nothing inhuman about them, but on the contrary would open up new possibilities of decided improvement for the worker.

The description of this pioneer work calls our attention to a book recently published in the United States, The Life and Times of a Happy Liberal—Biography of Morris Llewellyn Cooke.

This book reminds us opportunely that scientific management as introduced by Taylor into modern industry, has already a definite past, from which one sees emerging the names of those beginning to assume the aspect of historic figures. For these men were not only innovators, but also crusaders. Is it not true that no innovations have ever been discovered by men rugged enough to adopt them and spread them? These men, who were often a little scornful toward those preoccupied with practical affairs, as is the rule with businessmen, were in fact apostles essentially concerned with the public welfare. For example, it is not sufficiently realized that Taylor abandoned the practical application of his methods, by which he could have made considerable money, in order to travel across the United States as a pilgrim, spreading his idea through conferences, in order that the benefits which would accrue could be profitable first of all to the nation.

It was during this crusade that Taylor met Cooke, and it may be said that, on a social plane, the meeting of these two men was the beginning of a marvelous adventure. It must be admitted that even if Taylor's attitudes toward the workers were good, he was not very skillful in making them understood. He was a man of harsh language, although this harshness, as is so often the case, hid a great tender-heartedness. His meetings with the workmen or their representatives were often bittersweet. In popular language, he was not "diplomatic." But we must add that he was no more so in connection with the managers. Cooke's biography reports that one day, when Taylor announced that it would be necessary to declare a bonus of from thirty-five to fifty percent, an industrial manager of the company announced that twenty percent would be quite enough. Taylor, says the author, looked at him over his spectacles, relieving himself with this reproach, "Well, you are a damned hog!"

Morris Cooke was one of Taylor's first disciples, and it can be said that he appeared, after the great engineer, as a kind of knight, all of whose active years have been occupied in fighting to introduce progress into affairs, as well as to establish harmony between men. Everything which had a beginning in the work of Taylor received magnificent development in Cooke's hands. So if the public generally ignores the social and human aspect of "Taylorism", we may say that it is because of Cooke's efforts that it has taken the aspect we recognize today. It is through his initiative that "human relations" are now regularly included in the program of scientific management. In this domain he deserves the name of pioneer, for at every opportunity he opened the way for the intervention of labor leaders, to whom he demonstrated the useful role they could play in the realm of scientific management. They also knew they would always find a devoted ally in him. . . . •

* *A Life Member of the Society for Advancement of Management.*

DECEMBER CHAPTER ACTIVITIES

CHAPTER	SUBJECT	SPEAKER	TITLE	PLACE	DATE
Alabama	Union-Management Relations	J. F. Scroggins	President, Decatur Iron & Steel Co.	Tutwiler Hotel, Birmingham	13
		John B. Wood	Personnel Dir., Decatur Iron & Steel Co.		
Baltimore	Executive Development to Meet Modern Management Requirements				
Boston	The Pros and Cons of the Guaranteed Annual Wage	James Healy	Arbitrator on Labor Relations	Faculty Club, Sloan Building, M. I. T.	1
Bridgeport	Creative Engineering	John E. Arnold	Professor, M.I.T.	Algonquin Club	6
Chicago	Industrial Psychology in Business	William J. Giese	W. J. Giese & Associates	Furniture Club of America	13
	Application of Electronic Computers to Management Problems	Orville G. Hessler	Sears Roebuck & Co.	Hardings Presidential Grill	6
	Roundtable—The apparent results of the Guaranteed Annual Wage			Abbot Hall, Northwestern U.	5
Clearing	The Problem of the Aging Worker	Dr. R. K. Burns	University of Chicago	Industrial Clearing Club	14
Cleveland	Management in the Home	Orpha Mae Thomas	Instructor, Home Economics, Columbia University	Lake Shore Country Club	6
Columbus	Management—A Profession	Chairman, Bruce J. McNaughton		Fort Hayes Hotel—Gold Room	8
Dallas	Ladies Night				7
Greensboro	How Long Can You Afford to Operate Your Equipment	Harry Beggs	Cresap-McCormick & Paget	Starmount Country Club	6
Greenville	To be announced	Reuben Robertson, Sr.	Board Chairman, Champion Paper & Fibre Co.	Elks Club	14
Hudson Valley	Who is Responsible for Quality	Leonard A. Seder	Quality Control Consultant	Hendrick Hudson Hotel, Troy	6
Indianapolis	Future of Automation	Calvin Johnson	Special Ass't to V. P., Sperry-Rand Corp.	Marott Hotel, Marble Ball Room	8
Kansas City	Economic Outlook for 1956	Panel Discussion		Pickwick Hotel	6
Knoxville	Automation, Its Effect on Industrial Building and Production Design	Morley G. Melden	Associate Editor, FACTORY	Holston Hills Country Club	13
Lancaster	An Economist's Contribution to Corporate Planning	Roger Magoun	Economist, Norton Company	Hotel Brunswick	20
Milwaukee	Past Presidents' Annual "Surprise Meeting Night"			E. S. M. Building	8
Montreal	Management Uses Statistical Methods to Increase Production	B. H. Lloyd	Leetham Simpson Ltd.	Ritz-Carlton Hotel	14
Nashville	Employee Selection and Training	Dr. J. J. Ray	Director of Training, General Shoe Corp.	Andrew Jackson Hotel	8
New Haven	Ladies Night			Green Dolphin	15
New Orleans	Problems of Bank Customer Relations	Alvin T. Roemershauser	Whitney National Bank	Roosevelt Hotel	16
New York	Organization Changes—How Much and How Fast	Ewing Reilley		Shelton Hotel	15
N. E. Penna.	Union's Attitude (Or Why Workers Join Unions)	Charles Geunsch	Educ. Director, Region 9, UAW, CIO	Hotel Sterling	5
Northern N. J.	How to Reduce Costs	Phil Carroll	Professional Engineer	Essex House	8
Philadelphia	The Engineer and Management—His Contribution and His Challenge	Charles H. Frazier	Executive Engineer, The Phila. Gas Works	Poor Richard Club	6
Pittsburgh	Annual Christmas Party			Gateway Plaza	15
Providence	Measurement of Fatigue	Dr. Lucien Brouha	Haskell Laboratory, E. I. du Pont de Nemours & Co.	Providence Engineering Society	1
Raritan Valley	Plant Tour			Personal Products Corp.	7
Reading	The Executive's Wife			Iris Club	12
Sacramento	Incentive Management	John C. O'Keefe	Council of Profit Sharing Industries Chicago, Illinois	Capitol Inn	6
St. Louis	Surprise Meeting			Washington University	26
Trenton	Basic Philosophy of Labor Relations	Rev. Dennis J. Comey S.J.	Dir. Institute of Industrial Relations, St. Joseph's College	Hotel Hildebrecht	14
Twin City	Management Selecting and Recruiting	Jack Jurgenson		Minneapolis Athletic Club	8
Western N. C.	Color Facts and Fantasies	Norman Barnes	Manager of Public Relations, General Electric		14
Wilmington	The Determination and Improvement of Maintenance Effectiveness	O. S. York	Supervisor, Maintenance Engrg., E. I. du Pont de Nemours & Co.	Lord De La Warr Hotel	13

New Management Writing . . .

CAUSES OF INDUSTRIAL PEACE UNDER COLLECTIVE BARGAINING

Edited by Clinton S. Golden and Virginia D. Parker, pp. xiv and 369, $4.75, Harper & Brothers, 1955.

In every field there are classic books which have presented original research of great importance or which have announced new theories or ideas that revolutionized whole fields of knowledge. In labor relations, there are few classics because the field is a new one. The few that do exist are primarily histories. Their writers concerned themselves principally with the aspect of conflict in labor history: — conflict between unions and employers, conflict between unions and other unions; conflict between unions and government. Conflict was the order of the day when unions were first organized. Naturally books on labor history were devoted to crisis situations.

Now that American unions and employers have reached a reasonably peaceful state of coexistence, a book is needed to describe the new climate in labor relations. This need is initially supplied by "Causes of Industrial Peace Under Collective Bargaining," a book that has many of the hall marks of a classic.

In 1946, Mr. Clinton S. Golden, one of the editors of the book, addressed a National Planning Association Meeting. In part, he said: "In my opinion, the time has come when, instead of looking into the cause of conflict that we know and hear so much about, we ought to try to discover how much peace there is and what makes peace."

As a result, the National Planning Association published a series of thirteen booklets. Twelve of them are case histories of situations in which employers and unions arrived at a peaceful, mutually beneficial relationship. Each case history describes *how* this relationship was achieved. The thirteenth booklet is entitled "Fundamentals of Labor Peace, A Final Report."

The book, "Causes of Industrial Peace" is a condensation of all thirteen booklets which attempts to preserve all the pertinent information in the original series.

The case histories in the original series, and in the book, cover these firms:

1. Crown Zellerbach Corporation
2. Libbey-Owens-Ford Company
3. The Dewey and Almy Chemical Company
4. Hickey-Freeman Company
5. Sharon Steel Corporation
6. Lockheed Aircraft Corporation
7. The Nashua Corporation
8. Marathon Corporation
9. Colorado Fuel and Iron Corporation
10. LaPointe Machine Tool Company
11. American Velvet Company
12. American Steel Company

The book also gives a condensation of a final report on the NPA series entitled "Fundamentals of Labor Peace, A Final Report."

The authors of the digested case studies and the final report are: Clark Kerr, Roger Randall, Frederick H. Harbison, King Carr, Douglass McGregor, Joseph N. Scanlon, Donald B. Straus, J. Wade Miller, Jr., George Halverson, Charles A. Myers, George P. Schultz, R. W. Fleming, Edwin E. Witte, George W. Zinke, Robert P. Crisara, George S. Paul, Glenn W. Gilman, James W. Sweeney, and John R. Coleman.

The publication of the NPA case studies on "Causes of Industrial Peace" in book form makes possible their increased use both as reading matter for the busy executive and as a text for classroom use. This reviewer found the original NPA case studies extremely helpful as a text for his classes. The editing and condensation of the case studies rather than detracting have in a number of instances improved them. The editing has improved their readability and brings out more clearly and succinctly the background facts, the history of bargaining, and the conclusions reached.

The one thing missing in the condensed version are the tables giving such items as the history of wages and the production cost per unit of production. This reviewer found these tables helpful in giving students an understanding of the economic factors in a collective bargaining situation. Their absence makes the understanding of this concept more difficult.

The original NPA series of thirteen case studies in booklet form enjoyed widespread success. Their republication in book form seems destined to make their use even more widespread and their fame more permanent.

James J. Bambrick, Jr.
Labor Relations Specialist
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New York City

REVIEWS IN BRIEF

THE STAFF ROLE IN MANAGEMENT — ITS CREATIVE USES

By Robert C. Sampson, 226 pp., $4.00, Harper & Brothers, September, 1955.

A study of the nature of staff work and how varied kinds of expert, advisory staffs can make their most effective contribution to the day-by-day activity of operating line departments. Reviews such phases of staff work as gaining acceptance, counseling with an executive, and group counseling.

PSYCHOLOGY OF INDUSTRIAL BEHAVIOR

By Henry Clay Smith, 477 pp., $6.00, McGraw-Hill Book Company, October, 1955.

The following problems provide the framework of this book: How are men motivated to work in ways that are satisfying and productive? How can their frustrations and job anxieties be reduced? How can their job satisfaction and personal adjustment be improved? How can executives create more effective industrial teams, develop better supervisors, and build more productive organizations? How can companies improve union-management relations? How can the behavior of workers and work groups be more accurately measured, predicted, and controlled?

MANAGEMENT TRAINING— CASES AND PRINCIPLES

By William J. McLarney, pp. 371, $5.50, Richard D. Irwin, Inc., Publishers, Homewood, Illinois, September, 1955.

Cases and principles are supplied to be used in management training, fitted for first-line supervisors and middle-management, designed to improve the performance of men on these jobs and to prepare men to advance to such jobs. It contains four sections on the Management Team, Job Management, Developing the Work Team, and Maintaining the Work Team.

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